



## BUSHY RUN RESEARCH CENTER

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### STUDY TITLE

Two-Generation Reproduction Study in Sprague-Dawley (CD®)  
Rats with Alkyl Dimethyl Benzyl Ammonium Chloride  
(ADBAC) Administered in the Diet

### TEST ARTICLE

Alkyl\* Dimethyl Benzyl Ammonium Chloride  
\*C-12, 40%; C-14, 50%; C-16, 10%

### Data Requirement

Guideline 83-4

### Author

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### Study Completion Date

January 30, 1990

### PERFORMING LABORATORY

Bushy Run Research Center  
R. D. #4, Mellon Road  
Export, PA 15632

### Laboratory Project ID

52-524

### SPONSOR

ADBAC QUAT Joint Venture/  
Chemical Specialties Manufacturers Association  
Suite 1120  
1001 Connecticut Avenue, N.W.  
Washington, DC 20036



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**Compliance with FIFRA Good Laboratory Practices**

This study was conducted in full accordance with current Federal Insecticide, Fungicide, and Rodenticide (FIFRA) Good Laboratory Practices (GLP) 40 CFR Part 160, 1983, 1984. The test chemical characterization and identity were not verified at BRRC and are considered to be the responsibility of the Sponsor.

Study Director: Teresa L. Neep1-Bradley 1.22.90  
Teresa L. Neeper-Bradley, Ph.D. Date  
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Ralph Engel Date  
President, Chemical Specialties  
Manufacturers Association for  
ADBAC QUAT Joint Venture/Chemical  
Specialties Manufacturers Association

FIFRA Flagging Statement

I have applied the criteria of 40 CFR 158.34 for flagging studies for potential adverse effects to the results of the attached study. This study neither meets nor exceeds any of the applicable criteria.

Sponsor:

Ralph Engel	Date
President, Chemical Specialties	
Manufacturers Association for	
ADBAC QUAT Joint Venture/Chemical	
Specialties Manufacturers Association	



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Telephone (412) 733-5200  
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Project Report 52-524  
Project Number 87-37-97105  
87-37-97109  
January 30, 1990

### Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

Sponsor: ADBAC QUAT Joint Venture/  
Chemical Specialties Manufacturers Association

\* \* \* \* \*

#### SUMMARY

Male and female CD® (Sprague-Dawley) rats were exposed to alkyl (C-12, 40%; C-14, 50%; C-16, 10%) dimethyl benzyl ammonium chloride (ADBAC) by dietary inclusion at target dosage levels of 0, 300, 1000 or 2000 ppm over two generations. A total of 28 males and 28 females were evaluated at each dosage level. Following a 10-week pre-breed exposure period the F0 rats were randomly paired within dose groups for a three (3) week mating period to produce the F1 generation. Exposures continued through mating, gestation, parturition and lactation. At weaning, twenty-eight (28) F1 weanlings/sex/group, randomly selected to produce the F2 generation, were exposed to the same dietary concentration of ADBAC as their parents for ten (10) weeks. After their pre-breed exposure, F1 animals were paired as described above (for F0 parental animals) to produce the F2 generation. All procedures during mating, gestation and lactation of the F1 parents and selected F2 weanlings were performed as described above. All F0 and F1 parental animals were necropsied and examined for gross lesions; selected reproductive tissues from high dose and control groups were examined histologically as were other tissues with gross lesions. Ten (10) F1 and F2 weanlings/sex/dose were randomly selected and necropsied and examined for gross lesions. Remaining nonselected F1 and F2 pups at weaning were euthanized and discarded (after the necropsy of the selected pups).

During the 10 week pre-breed exposure, F0 males exhibited no reduction in body weight. During the same period, F0 females at 2000 ppm exhibited reductions in body weight for weeks 5, 6, 9 and 10 of treatment. Body weight gain was also reduced at 2000 ppm for one week (week 8-9) during the pre-breed treatment period. Food consumption in F0 females at 2000 ppm was also reduced for the first four exposure weeks.

At the F0 breed to produce F1 litters, reproductive parameters were unaffected by treatment. There were significant reductions in gestational day 0 body weights but no body weight gain reductions at 2000 ppm; lactational body weight gains throughout lactation and body weight on lactational day 21 were increased at 2000 ppm. Food consumption during gestation and lactation was unaltered by test chemical treatment. The F1 litters exhibited reduced body weights per litter on postnatal days 21 (weaning) and 28 (post-weaning) at 2000 ppm. F1 pup body weight gains were reduced for lactational days 14-21 and 21-28 (post-weaning). There was no effect of treatment on postnatal deaths (postnatal days 0-28). There were no treatment-related lesions observed in the necropsy of F1 pups which died during lactation, of randomly selected F1 pups, ten/sex/dose, or of F0 adults. There were also no treatment-related lesions observed in the histopathologic examination of selected organs from high dose and control F0 adults.

During the ten-week pre-breed exposure, F1 males at 2000 ppm exhibited no reduction in body weights but weight gain was reduced at 2000 ppm for the second treatment week. Food consumption was also reduced at 2000 ppm for two of the 10 treatment weeks. There were no significant effects on F1 females.

At the F1 breed to produce F2 litters, reproductive parameters were unaffected by treatment. Maternal body weights at 2000 ppm were unaffected during the gestational and lactational periods. However, gestational food consumption was reduced for days 7-11 and 14-17 at 2000 ppm. F2 pup body weights per litter were reduced at 2000 ppm for postnatal day 28 (post-weaning). Pup weight gains were also reduced at 2000 ppm for lactational days 14-21 (pre-weaning) and for days 21-28 (post-weaning). Perinatal deaths and lactational survival were unaffected by treatment. There were no treatment-related lesions observed in the necropsy of F2 pups which died during lactation, of randomly selected F2 pups, ten/sex/dose, or of F1 adults. There were also no treatment-related lesions observed in the histopathologic examination of selected organs from high dose and control F1 adults. There were no apparently treatment-related deaths of adult animals on study.

Therefore, exposure of CD® rats to alkyl dimethyl benzyl ammonium chloride in the diet for two generations resulted in parental toxicity at the target dosage level of 2000 ppm; perinatal toxicity was concomitant with parental toxicity, being well-defined at 2000 ppm. There were no treatment-related reproductive effects observed in this study. The "no observable effect level" (NOEL) established for adults in this study was 1000 ppm; the NOEL for offspring was also 1000 ppm. The A/D ratio (the dose level at which there were no observable effects in adults/the dose level at which there were no observable effects on offspring) is 1 (1000 ppm/1000 ppm) indicating no increased risk to the offspring in the absence of indications of adult toxicity.

## OBJECTIVES

This study was performed to evaluate the potential of alkyl (C-12, 40%; C-14, 50%; C-16, 10%) dimethyl benzyl ammonium chloride (ADBAC) administered in the diet to CD® (Sprague-Dawley) rats to produce alterations in parental fertility, maternal pregnancy and lactation, and the growth and development of the offspring for two generations, one litter per generation.

## MATERIALS AND METHODS

### Animals and Husbandry

One hundred fifty-nine (159) virgin female and 160 virgin male outbred albino CD® (Sprague-Dawley) rats [CrI:CD®(SD)BR] were received from Charles River Breeding Laboratories, Kingston, NY on April 4, 1988, 27 days old (males approximately 75 g, females approximately 65 g) upon arrival. (The actual dates of all major phases of the study are presented in Table 1.) These animals were quarantined in animal room 173 for approximately two weeks during which time they were weighed, examined by a veterinarian and representative animals were subjected to fecal examination, serum viral antibody analysis and histological examination of selected organs. Results of the physical examination, serology, parasitology and histopathology were negative for signs of infectious disease; the animals were considered in good health and suitable for use in this study. Study animals remained in animal room 173 from arrival for the duration of the study until final sacrifice on February 2, 1989. Rats were housed initially two/same sex during quarantine and then singly, except for the cohabitation and lactation periods, for the duration of the study. During the quarantine and treatment periods, mating and most of gestation, rats were housed in stainless steel, wire-mesh cages (22.5 x 15.5 x 18.0 cm; mating cages 22.5 x 31.0 x 18.0 cm). From gestational day 20, through parturition, and lactation until weaning, female rats were housed in plastic shoebox cages (19.0 x 10.5 x 8.0 in.) with Alpha-Dri® bedding (certified, Shepherd Specialty Papers, Inc., Kalamazoo, MI). Feed (Certified Ground Rodent Chow® No. 5002, Ralston-Purina Company, St. Louis, MO; batch numbers in the study notebooks) and tap water (Municipal Authority of Westmoreland County, Greensburg, PA) were available ad libitum. The water was delivered by an automatic watering system with demand control valves mounted on each cage rack for rats in stainless steel cages. Female rats in shoe-box cages received water by water bottles with stainless steel sipper tubes. Analyses of the feed and water for contaminants and of the feed for nutrient levels indicated all contaminant levels were below the maximum certified standards and all nutrient levels were above the minimum certified standards. Deotized Animal Cage Board® (Shepherd Specialty Papers, Inc., Kalamazoo, MI) was placed beneath the stainless steel cages and changed regularly. Animals were kept on a 12-hour photoperiod and room temperature and relative humidity were recorded continuously (Cole-Parmer Hygrothermograph® Seven-Day Continuous Recorder, Model No. 8368-00, Cole-Parmer Instrument Company, Chicago, IL). Temperature was maintained at 66-73 °F except for three (3) two (2) to six (6)-hour periods during which the temperature ranged from 73-76 °F and one (1) two (2)-hour period during which the temperature ranged from 64-66 °F. Relative humidity was maintained at 40-60% except for several brief (< 15 minutes) spikes during which the humidity

ranged from 60-75% or 29-40%, and longer periods [from one (1) to four (4) hours] during which the humidity ranged from 60-68%. In addition, during a single nine (9)-hour period the humidity ranged from 28-40%. None of these minor deviations were considered to have significant impact on the study.

All animals were assigned a unique number, received a stainless steel ear tag (Monel®, Gey Band and Tag Company, Morristown, PA) and were toe-clipped prior to the start of the study.

#### Test Chemical and Diet Preparation and Analysis

Five 5-gallon samples of the test chemical, alkyl dimethyl benzyl ammonium chloride [ADBAC; CAS No. 68391-91-5; Reference (Lot) number 7293K] were received at BRRRC on November 11, 1987 from Sherex Chemical Company, Janesville, WI, with purity 81.09%, as provided by the supplier. The test chemical samples received the BRRRC Number 50-512 A through E. The material was a pale yellow viscous liquid. All weights of the test material were corrected for percent active ingredient for diet and standard preparation. The chemical was stored in the freezer and a reference sample from each shipment was retained by BRRRC. The test diets were prepared as follows: A concentrated premix was prepared by direct addition of the test chemical to ground chow and mixing in a Hobart mixer for approximately one hour. The premix was then appropriately diluted with control chow and mixed for 30 minutes to formulate the high dose diets. The mid dose diet was prepared by dilution of the appropriate amounts of the high dose diet with control chow and mixing for 15 minutes; the low dose diet was prepared by dilution of the mid dose mixture and mixing for 15 minutes. The control diet required no special preparations. The test diets were stored at room temperature in polyethylene containers, and premixes and the test diets were prepared weekly. Details on diet preparation are retained in the appropriate study notebooks. Animals received fresh diet weekly.

The concentration of ADBAC in the test diets was determined using a Water's High Pressure Liquid Chromatograph equipped with a Water's Model 481 Lambda Max Variable Wavelength Detector or a Water's 484 Tunable Absorbance Detector and a Water's U-Bondapak C-18 column (3.9mm x 30 cm) (See Appendix 1 for details.) Homogeneity and stability analyses of the test diets were performed prior to the start of exposures. The results of the homogeneity study indicated that the distribution of ADBAC in the test diet was uniform. The stability study indicated that the dosed feed was stable for at least 14 days when stored in open glass feed jars at room temperature. Dosed feed was stable for at least 21 days when stored in closed polyethylene containers at room temperature. The dose levels selected by the sponsor were 0, 300, 1000 and 2000 ppm. Details of the procedures and results of diet analyses for this study are presented in Appendix 1.

#### Experimental Design

A graphic representation of the study design is presented in Figure 1. F0 animals, 28/sex/dose, were exposed to the appropriate diet for 10 weeks and then bred once to produce F1 litters. Twenty-eight (28) pups/sex/dose from the

F1 generation were selected to be parents of the F2 generation and were exposed to the appropriate diet for 10 weeks prior to mating. The selected F1 animals were subsequently bred to produce the F2 litters. Details on the procedures followed are provided in the following narrative.

**Pre-Breed Exposures:** All initial animals (F0 generation) were weighed during quarantine just prior to the start of exposures and 112 per sex were randomly distributed stratified by body weight into four dose groups, 28/sex/group, using a computer program. Animals were not placed on study if they exhibited clinical signs during quarantine, or if their body weight exceeded 20% of the mean weight for each sex. At the start of treatment the mean weight for males for all four groups ranged from 212.2-213.4 g; for females mean weights ranged from 148.3-150.2 g; the approximate age was six (6) weeks. Animals received from the breeder but not used in the study were euthanized and discarded. The study animals, housed singly, were exposed to ADBAC in the diet, ad libitum, at 0, 300, 1000 or 2000 ppm for ten (10) consecutive weeks. During the pre-breed exposure period, the animals were examined twice daily for mortality and any overt signs of toxicity. Detailed clinical examinations were conducted once daily. Study animals were weighed weekly and food consumption also was measured weekly. These measurements allowed for calculation of the amount of chemical consumed, expressed as mg test article/kg of body weight.

**Mating:** After the ten week pre-breeding exposure period was completed, the animals were mated on the basis of one male to one female selected randomly within each dose group for a period of 21 days to produce the F1 generation. (After the first seven days of the mating period females of unsuccessfully mated pairs were placed with males of other unmated pairs within the same dose group; after an additional seven days, unsuccessfully mated pairs were switched again for a period of seven days or until successful mating had occurred, whichever came first, allowing for a total of 21 days to mate.) The observation of a copulation plug and/or vaginal sperm was considered evidence of successful mating. Females were examined twice daily (a.m. and p.m.) during the cohabitation period for copulation plugs and once daily (a.m. only) for the presence of vaginal sperm. The day a copulation plug or vaginal sperm was observed was designated gestational day (gd) 0 (Hafez, 1970). Once a plug was observed, the male and female from that mating pair were individually housed. For any mating pairs which did not show evidence of successful mating (i.e., no copulation plug was observed), the last scheduled mating day was considered gd 0 for that female and the animals were treated accordingly for subsequent events. Mated females were weighed on gd 0, 6, 15 and 20. On gd 20, each female was transferred to a shoe-box cage. Females were observed twice daily beginning on gd 20 for evidence of littering. Dams with litters were weighed on postnatal days 0, 7, 14 and 21. The dams were allowed to rear their young to day 21 postpartum. On day 21 postpartum, each litter was weaned (the dam was removed from the shoebox cage). When the last F1 litter reached day 28 postpartum, 28 male and 28 female pups per dose group were randomly selected to produce the F2 generation. Each litter was represented at least once per sex if possible, and a second pup of the same sex was chosen from a given litter only after one pup per sex had been chosen from all possible litters. In addition, ten (10) F1 pups per sex per dose were randomly selected for necropsy. The remaining nonselected F1 pups were examined for gross external abnormalities and then euthanized and discarded. F0 parental males were



necropsied after the completion of parturition; F0 parental females were necropsied after the F1 litters were weaned. Selected F1 animals continued on feed at the same concentration of ADBAC as their parents.

F1 animals selected to be parents of the F2 generation were exposed to the test diets for at least ten weeks as described above. While the approximate age at the scheduled start of the pre-breed period was seven to eight weeks, F1 animals had been continually maintained on dosed feed since they began self-feeding. (Also, due to the age of F1 animals at scheduled study start, body weights were collected for three weekly intervals prior to the scheduled start date. These data are not summarized in the results section, but can be found in individual animal appendices.) At the scheduled start of pre-breed exposures, mean body weights of F1 males were 272.6-289.8 g, and F1 females averaged 187.9-196.8 g. Following the ten-week pre-breed treatment period, F1 animals, of approximately 17 to 18 weeks of age, were mated to produce the F2 generation. Mating was as described above for the F0 animals, including but not limited to, pairing one male:one female, cohabitation for a total of 21 days (with a mating switch of unsuccessful pairs every seven days) or until a copulation plug was observed, whichever came first, and transfer of pregnant females to appropriate caging on gd 20. Brother-sister matings were avoided whenever possible.

Offspring: All pups from the F1 and F2 generations were sexed and examined as soon as possible on the day of birth (postnatal day 0) to determine the number of viable and stillborn members of each litter. Litters were evaluated twice daily for survival. On day 4 after birth, the size of each litter was adjusted by eliminating extra pups by computerized random selection to yield, as nearly as possible, four males and four females per litter. Culled pups were subjected to a detailed external examination and then sacrificed by decapitation and discarded. Survival indices were calculated at 0, 4, 7 and 14 days after birth and at weaning. All live pups were sexed and examined at birth (postnatal day 0) and examined and weighed individually on postnatal days 1, 4, 7 and 14 and at weaning. All pups were also weighed on postnatal day 28 since all litters were held until the youngest litter was 28 days old. The body weights and sexes were recorded on an individual basis but the pups were not uniquely identified at this stage. All pups were examined for physical abnormalities at birth and throughout the pre-weaning period. All stillborn pups and pups dying during lactation were necropsied when possible to investigate the cause of death. Any pups dying before day 4 were necropsied for determination of possible defects and cause of death and then preserved in buffered neutral 10% formalin. The thoracic and abdominal organs from pups which died after day 4 were preserved in buffered neutral 10% formalin for possible subsequent histopathological examination.

All F1 litters were allowed to remain together for a minimum of seven days after weaning. Twenty-eight (28) males and 28 females from each dose group were then selected from F1 litters on a random basis to become parents of the next generation (F1 parents to produce F2 litters) as previously described. All pups were available for selection except those not expected to survive because of physical abnormalities. The parentage of each weanling was ascertained to avoid brother-sister matings if possible. An additional ten pups of each sex from each test group in the F1 generation were also randomly selected for necropsy (see below). The remaining offspring were examined for gross external abnormalities, euthanized and discarded.

The F2 litters were evaluated exactly as described above for the F1 litters except at weaning, 10/sex/dose were selected for necropsy, but no animals were selected to become parents of the next generation.

### Necropsy

Gross and Microscopic Pathology: All F0 and F1 parental animals in all groups (both generations) were euthanized by severing the brachial blood vessels following anesthesia with methoxyflurane, and subjected to a complete gross necropsy. Sacrifice of the parental males occurred after parturition of the F1 or F2 litters; sacrifice of parental females occurred after F1 or F2 litters had been weaned. The following tissues were harvested from all parental animals: vagina, uterus, ovaries, testes, epididymides, seminal vesicles and prostate, and other tissues with gross lesions identified as being potentially treatment-related. These tissues from the 28 male and 28 female adults from the control and high dose group were subjected to a histopathologic examination after fixation in buffered neutral 10% formalin, paraffin embedment, and sectioning and staining with hematoxylin and eosin. Any of the above organs or tissues showing gross alterations were evaluated microscopically in the low and mid dose groups.

A complete gross necropsy and histopathologic examination were conducted for any parental animals dying on test. The gross necropsy included: examination of the external surfaces; all orifices; cranial cavity; carcass; external and cut surfaces of the brain and spinal cord; the thoracic, abdominal, and pelvic cavities and their viscera; and cervical tissues and organs. A complete set of tissues listed above were retained. In addition, the fixed (buffered neutral 10% formalin) uteri from any female of the F0 or F1 generations failing to produce a litter were stained with potassium ferricyanide for confirmation of pregnancy status; implantation sites (if any) were recorded. This procedure did not affect the subsequent histopathologic examination.

A gross internal examination was also performed on any pup appearing abnormal or dying on test, and on ten pups randomly selected for each sex from each test group of the F1 and F2 generations.

Details of the methods and results from the necropsy, gross and microscopic pathology examinations of parental and weanling animals are presented in Appendix 2 (Report and individual animal data).

### Reproductive Indices

The following indices were calculated for F0 and F1 males and females for each breed (F0 to produced F1 litters and F1 to produce F2 litters):

- a. Mating index (females) =

$$\frac{\text{Number of plug-/sperm-positive females}}{\text{Total number of females paired}} \times 100$$

- b. Fertility index (females) =

$$\frac{\text{Number of females pregnant}}{\text{Number of plug-/sperm-positive females}} \times 100$$

c. Mating index (male) =

$$\frac{\text{Number of males impregnating females}}{\text{Total number of males paired}} \times 100$$

d. Fertility index (male) =

$$\frac{\text{Number of males siring litters}}{\text{Number of males impregnating females}} \times 100$$

The following indices were calculated for F1 and F2 litters:

e. Gestational index =

$$\frac{\text{Number of females with live litters}}{\text{Number of females pregnant}} \times 100$$

f. Live birth index =

$$\frac{\text{Number of live pups at birth}}{\text{Total number of pups born}} \times 100$$

g. 4-Day survival index =

$$\frac{\text{Number of pups surviving 4 days (precull)}}{\text{Total number of live pups at birth}} \times 100$$

h. 7-Day survival index =

$$\frac{\text{Number of pups surviving 7 days}}{\text{Total number of live pups at 4 days (postcull)}} \times 100$$

i. 14-Day survival index =

$$\frac{\text{Number of pups surviving 14 days}}{\text{Total number of live pups at 7 days}} \times 100$$

j. 21-Day survival index =

$$\frac{\text{Number of pups surviving 21 days}}{\text{Total number of live pups at 14 days}} \times 100$$

k. Lactation index =

$$\frac{\text{Number of pups surviving 21 days}}{\text{Total number of live pups at 4 days (postcull)}} \times 100$$

### Statistical Analyses

The unit of comparison was the male, the female (during the pre-breed exposure period), the pregnant female, or the litter (Weil, 1970). Results of the quantitative continuous variables (e.g., body weights, food consumption, organ weights, etc.) were intercompared for the three treatment groups and one control group by use of Levene's test for equal variances (Levene, 1960); analysis of variance (ANOVA), and t-tests. When Levene's test indicated

homogeneous variances and the ANOVA was significant, the pooled t-test was used for pairwise comparisons. When Levene's test indicated heterogeneous variances, all groups were compared by an ANOVA for unequal variances (Brown and Forsythe, 1974) followed, when necessary, by the separate variance t-test for pairwise comparisons. The significance levels for the t-test comparisons were corrected by the Bonferroni method.

Nonparametric data were statistically evaluated using the Kruskal-Wallis test (Sokal and Rohlf, 1969) followed by the Mann-Whitney U test for pairwise comparisons (Sokal and Rohlf, 1969) when appropriate. Frequency data (such as the various indices) were compared using the Fisher's exact test (Sokal and Rohlf, 1969). For all statistical tests, the fiducial limit of 0.05 (two-tailed) was used as the criterion for statistical significance.

### Personnel

The evaluation of ADBAC for reproductive toxicity in CD® (Sprague-Dawley) rats was conducted at the Bushy Run Research Center (BRRC), Export, PA. The study was sponsored by The ADBAC QUAT Joint Venture/Chemical Specialties Manufacturers Association, Washington, DC. The Sponsor's Representative was Dr. G. P. Schoenig, Charlottesville, VA. The BRRC personnel indicated below contributed to the completion of this study. Dr. R. W. Tyl served as Study Director through the in-life portion of the study until June 9, 1989. Dr. T. L. Neeper-Bradley served as study director from June 9, 1989 until completion of the study. Reproductive and Developmental Toxicity Section personnel included R. R. Altman, T. R. Brownfield, B. L. Butler, M. A. Copeman, D. L. Fait, L. C. Fisher, L. J. Fosnight (Study Leader), M. F. Kubena and D. J. Tarasi. Oral/Dermal personnel included Dr. J. P. Van Miller, L. A. Boylstein, A. G. Chiaramonte, G. A. Ream, G. W. Klingensmith, Jr., E. J. Mika and E. V. Weaver. The attending veterinarian and study pathologist was Dr. P. E. Losco. The diet analyses were performed by Dr. J. P. Van Miller and M. A. Vrbancic. Necropsy and Histology personnel were H. M. Steel, M. A. McGee, M. G. Brawley, C. D. DeMann, G. J. DiSalvo, and C. Martin. Additional animal care personnel included J. DeNinno, C. A. Ferry, L. E. Lipko and C. L. Wagner. Quality Assurance personnel were L. J. Calisti, J. R. Bernard, J. H. Coleman and B. E. Thomas. The final report was prepared by Dr. T. L. Neeper-Bradley with the assistance of L. C. Fisher for analyses of reproductive and in-life data. The individual scientist reports were signed by the authors.

### Storage of Records

All biological samples, original data sheets, computer printouts, and records which remain the responsibility of BRRC are stored in the BRRC Archives for the length of time mandated by the appropriate guidelines (EPA, 1983; 1984; OECD, 1981; 1983). Copies of this report are filed in the BRRC Archives and with the Sponsor. The protocol and one (1) amendment detailing the design and conduct of this study are presented in Appendix 5.

## RESULTS

### Analysis of Dosed Feed

The periodic analyses of the dosed feed indicated that the mean concentrations of ADBAC in the diet for the 300, 1000 and 2000 ppm dosage levels were 95.3-109.0% of nominal for 300 ppm, 95.6-107.9% of nominal for 1000

ppm and 94.7-108.0% of nominal for 2000 ppm, respectively. The time weighted averages were 103.2, 102.5 and 102.2% of nominal for the 300, 1000 and 2000 ppm diets. No test chemical was detected in any of the control diets with a minimum detection limit of 50 ppm. (Details are presented in Appendix 1.)

#### F0 Parental Adults

Clinical Observations: Clinical observations of F0 males and females are summarized in Tables 2 and 3, respectively. There were no treatment-related clinical signs of toxicity in either sex.

Body Weights: During the ten (10) week pre-breed exposure of the F0 animals, there were no significant reductions in body weight of males at any treatment level. However, male mean body weights at 1000 ppm were statistically increased relative to control values for weeks 3, 4, 5, 7, 8 and 9 of the treatment period (Table 4). These increases are not considered to be treatment-related. Weight gains (Table 5) were significantly reduced at 2000 ppm for the fifth treatment week. However, male F0 weight gains were essentially equivalent across groups during the pre-breed period. Body weight gain increases at 1000 ppm for weeks 0 to 1 and 3 to 4 of the pre-breed treatment period as well as for weeks 13 to 14 (following the mating period) are not considered to be treatment related. Significant reductions in body weights of F0 females at 2000 ppm which appear to be treatment related were noted for weeks 5, 6, 9 and 10 of pre-breed treatment (Table 6). F0 female weight gains were significantly reduced at 2000 ppm for week 8 to 9 of treatment. Body weights of F0 females at 300 and 1000 ppm were equivalent to those of controls during the pre-breed period. Body weight gain was significantly increased during week 4 to 5 at 300 ppm but the increases did not appear treatment related (Table 7). The body weight data are graphically represented in Figure 2 (for F0 males) and Figure 3 (for F0 females).

Food and Test Material Consumption: Food consumption in F0 males was significantly reduced at 2000 ppm for the first week of treatment only (Table 8). At 1000 ppm, food consumption was increased significantly for weeks 7-8 and 8-9 of the pre-breed treatment period. Following the mating period, during week 13-14, F0 males at 300 and 1000 ppm exhibited increased food consumption as well. Only reduced food consumption was considered related to the test chemical treatment. Furthermore, the reduction in food consumption only for the first treatment week was most likely due to test chemical palatability. The calculated doses of test chemical in mg/kg/day, based on the feed consumed, the body weight, and the levels of dietary ADBAC, are presented in Table 9 for F0 males. As expected, because of decreasing feed consumption as a function of increasing body weight with age, the calculated doses of test chemical dropped steadily from week 1 to 10 in all treated groups: from 30.9 to 16.2 mg/kg/day at 300 ppm, from 102.4 to 52.6 mg/kg/day at 1000 ppm and from 187.6 to 104.7 mg/kg/day at 2000 ppm. Female F0 food consumption (Table 10) exhibited significant decreases at 2000 ppm during the first four weeks of exposure. Food consumption was equivalent across all treatment groups for the remaining six weeks of pre-breed treatment with the exception of a spurious increase at 300 ppm for treatment week 4-5. The calculated dosage of test chemical ingested by F0 females (Table 11) exhibited a pattern similar to that described above for the F0 males wherein dosages dropped from 32.4 to 21.0 mg/kg/day at 300 ppm, from 105.9 to 67.0 mg/kg/day at 1000 ppm and from 198.5 to 138.7

mg/kg/day at 2000 ppm. These means also reflect the expected incremental increase in test chemical consumption with increasing dose level. The above calculated doses are based on the target chemical concentration in the feed. (Details on individual animal data are presented in Appendix 3A.)

#### F0 Reproductive Parameters at F1 Breed

Following the ten week pre-breed exposure, the F0 animals were randomly paired within dose groups for 21 days to produce the F1 generation. Reproductive parameters including gestational length as well as mating, fertility and gestational indices were unaffected by treatment (Table 12). Maternal F0 gestational body weight at 2000 ppm was reduced on gestational day 0 (Table 13). Gestational body weights subsequent to gd 0 were equivalent across treatment groups. Body weight gains were equivalent across treatment groups throughout gestation. Gestational food consumption, summarized in Table 14, was equivalent among treatment groups. Maternal lactational body weights did not significantly differ among dose groups from delivery through day 14. On lactational day 21 mean body weight of dams at 2000 ppm exhibited a significant increase. Increased lactational body weight gain was observed at 2000 ppm throughout lactation (Table 15). Lactational food consumption was equivalent across treatment groups (Table 16).

#### F1 Litter Data

The total number of F1 pups born, as well as the total numbers of live and stillborn pups were equivalent across treatment groups. F1 litter viability from lactational day 0 through lactational day 28 was unaffected by treatment (Table 17). F1 litter sizes and sex ratios (% males) were also unaffected by treatment (Table 18). Pup body weights as well as body weight gains (by litter and by sex by litter) were equivalent across dose groups through lactational day 14 (Table 19). Significant reductions in F1 pup body weight were observed at 2000 ppm on lactational days 21 (for males, females and entire litter) and 28 (for females and entire litter); pup body weight gains at 2000 ppm were significantly reduced for the corresponding time intervals, lactational days 14-21 (for males, females and all pups) and lactational days 21-28 (for females only). F1 pup survival indices were unaffected by test chemical treatment. No treatment-related lesions were observed in the F1 pups which died during the lactation period. Necropsy of ten (10) randomly selected F1 pups/sex/dose group indicated no treatment-related findings. (See Appendix 2 for selected weanling necropsy data; necropsy findings for pups which died during the lactational period can be found in the postnatal notebooks.)

#### F0 Parental Necropsy

After the weaning of the F1 litters, F0 parental females were necropsied, (parental F0 males were necropsied following delivery of the litters) and histopathology was performed on selected organs from high dose and control animals. In addition, testes from F0 males from low and mid dose groups which did not sire litters were evaluated histologically. (Testes were among the designated tissues evaluated in all control and high dose parental males as well.) There were no treatment-related lesions observed in the gross necropsy or in the histopathologic examination (details in Appendix 2).

### F1 Parental Adults

Clinical Observations: Clinical signs observed during the F1 pre-breed period are indicated in Tables 21 (F1 males) and 22 (F1 females). None appeared treatment related. (One F1 male at 2000 ppm was sacrificed moribund on study day 50 due to a cage accident.)

Body Weights: During the ten-week pre-breed exposure of the F1 animals selected to be parents of the next generation, body weights of treated males were equivalent to those of controls at all time points monitored including the terminal measurement at sacrifice (week 17) (Table 23). The increased mean body weight at 1000 ppm for week 5 is not considered to be treatment related. Weight gain (Table 24) was reduced at 2000 ppm during the second pre-breed treatment week. At 1000 ppm weight gain was significantly increased for week 2-3 and 13-14 (during the F1 mating period); the increased weight gains are not considered to be treatment related. The F1 females exhibited no reductions in body weight (Table 25). Significantly increased body weights at 1000 ppm for weeks 3 through 10 do not appear treatment related. Body weight gains in F1 females were essentially equivalent across groups; significant increases at 300 and 2000 ppm during week 3-4 of treatment were not considered to be associated with test chemical treatment (Table 26). Body weight data are graphically presented in Figures 4 (F1 males) and 5 (F1 females).

Food and Test Material Consumption: Food consumption for the F1 males (Table 27) exhibited significant reductions at 2000 ppm for weeks 3-4 and 6-7 of the pre-breed period and for week 15-16, the last full treatment week. While food consumption was significantly increased at 1000 ppm for week 13-14 (following the mating period), the increase was not considered to be related to treatment. Calculated dosage of test chemical ingested exhibited the expected pattern as previously described. The amount ingested in mg/kg dropped over time within groups, 26.1-15.6 at 300 ppm, 87.4-51.0 at 1000 ppm and 172.4-100.0 mg/kg at 2000 ppm, and the amounts ingested exhibited the expected rise with increasing dose (Table 28). Treated F1 females exhibited no reductions in food consumption throughout the ten-week pre-breed period (Table 29). Significantly increased food consumption was observed at 1000 ppm for treatment week 8-9 and at 300 ppm for weeks 2-3, 5-6, 6-7, 8-9 and 9-10. Calculated dosages of test chemical ingested over time for the females were: 28.5-21.8 mg/kg at 300 ppm, 92.9-69.1 mg/kg at 1000 ppm and 182.3-138.6 mg/kg at 2000 ppm, and they exhibited the expected incremental rise with increasing dosage (Table 30) (see Appendix 3B for individual animal data).

### F1 Reproductive Parameters at F2 Breed

After the completion of the ten-week pre-breed exposure, the F1 animals were randomly paired within dose groups to produce the F2 generation. There were no differences among groups for reproductive parameters including gestational length (Table 31). Maternal F1 gestational body weight, but not body weight gain, at 1000 ppm was significantly increased throughout gestation (Table 32). Body weights and weight gains of gravid dams at 300 and 2000 ppm did not significantly differ from those of control dams. Food consumption (Table 33) for days 7-11 and 14-17 of gestation was significantly reduced at 2000 ppm. Lactational body weights were significantly increased at 1000 ppm

for days 0, 7 and 14. Lactational body weights at 300 and 2000 ppm were equivalent to body weights of control dams. Lactational body weight gains were equivalent across dose groups. Lactational food consumption was unaffected by test chemical treatment (Table 35).

#### F2 Litter Data

F2 litter viability from lactational day 0 through lactational day 28 was unaffected by treatment (Table 36). F2 litter sizes and sex ratios (% males) were also unaffected by treatment (Table 37). F2 pup body weights from the day after delivery to weaning (lactational day 21) were equivalent across groups. On lactational day 28, one week subsequent to weaning, pup body weights (males, females and all pups) were significantly reduced at 2000 ppm (Table 38). F2 pup weight gains were equivalent across dose groups to lactational day 14. For lactational days 14-21 and 21-28 pup weight gains (for females and all pups on days 14-21 and for females, males and all pups on days 21-28) were significantly reduced at 2000 ppm. Live birth and survival indices were equivalent for all groups of F2 pups (Table 39). (See Appendix 4 for individual animal data). No treatment-related lesions were observed in F2 pups which died during lactation, or in the ten/sex/dose subjected to gross necropsy at weaning. (Individual necropsy findings for F2 pups which died during lactation can be found in the postnatal notebook. Necropsy data for selected F2 pups can be found in Appendix 2.)

#### F1 Parental Necropsy

After weaning of the F2 litters, all of the F1 parental females were subjected to gross necropsy (as with the F0 parental males, F1 parental males were necropsied after delivery of the pups), and histopathologic examination of selected tissues was conducted on high dose and control animals. Testes from low and mid dose group F1 males which did not sire litters were evaluated histologically as well. No treatment-related lesions were observed at necropsy or in the histopathologic examinations. Details are provided in Appendix 2 (Report and individual animal data).

### DISCUSSION

The present study, evaluating exposure of CD® (Sprague-Dawley) rats to ADBAC in the diet for two generations, one litter per generation, has shown a consistent pattern in induction of adult toxicity at 2000 ppm, evidenced by reduced body weights in F0 females (but not F0 males or F1 males and females), reduced weight gain in F0 males and females and F1 males (but not F1 females) and reduced food consumption in F0 males and females and F1 males (but not F1 females) during the ten-week pre-breed exposures. With the exception of body weights and food consumption in F0 females, reductions in the pre-breed parameters appeared transitory, disappearing after one or two weeks.



Reproductive parameters were not affected in either of the two breeds (F1 or F2). At initiation of the gestational period, body weights of the F0 (but not F1) females at 2000 ppm were reduced; weight gains throughout gestation for both breeds were normal. Reduced gestational food consumption was observed in F1 females only.

F1 litters at 2000 ppm exhibited reduced body weights at weaning; both F1 and F2 generations of pups exhibited reduced body weights on day 28 postpartum, one week subsequent to weaning. Body weight gains in both F1 and F2 litters were reduced for corresponding time intervals (lactational days 14-21 and 21-28) as well. The reduction in pup body weights (and weight gain) at 2000 ppm was clearly treatment-related as it corresponds to the time when the pups began to rely solely on the test chemical diet as their source of nutrition. It should also be noted that while statistical reductions were observed only for female pup body weight gains on lactation days 21-28 in F1 litters and for male pups on days 14-21 in F2 litters, body weight gain reductions were apparent in both sexes of pups during these time periods.

#### CONCLUSIONS

Continuous exposure of CD® (Sprague-Dawley) rats to alkyl dimethyl benzyl ammonium chloride in the diet for two generations resulted in parental toxicity at 2000 ppm, limited to body weight reduction, weight gain depression and decreased food consumption. Postnatal toxicity was also noted at 2000 ppm and consisted of reduced pup body weights during and one week subsequent to lactation. These effect levels are equivalent to 122.7 mg of test chemical per kg body weight, taking the mean of the amount of test chemical ingested at the last measured point (week 10) when the body weights were stable for F0 and F1 male and female adults. The "no observable effect level" (NOEL) for adults in this study was 1000 ppm. The NOEL for offspring in this study was also 1000 ppm. The A/D ratio (the dose level at which there were no observable effects in adults/the dose level at which there were no observable effects in offspring) is 1 (1000 ppm/1000 ppm) indicating no increased risk to offspring in the absence of maternal effects.

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Study Director

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D. E. Dodd, Ph.D., DABT Date  
Assistant Director

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F. R. Frank, Ph.D. Date  
Director

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WPC/esk/1801P-3  
01-16-90

Table 1  
Study Schedule

Event	Dates
Animal receipt (F0)	April 4, 1988
First day of test chemical administration	April 20, 1988
F0 pre-breed dosing period (10 weeks)	April 20, 1988 - June 29, 1988
F0 adults paired for F1 mating	June 29, 1988
F0 mating period for F1 generation	June 30, 1988 - July 20, 1988
Delivery of F1 litters	July 21-27, 1988
Weaning of F1 litters	August 11-17, 1988
Selection of F1 parental pups	August 18-24, 1988
Necropsy of selected F1 weanlings (80 animals)	August 26, 1988
Euthanization of remaining F1 weanlings	August 26, 1988
Necropsy of F0 adult males	August 15-16, 1988
Necropsy of F0 adult females	August 12-31, 1988
F1 pre-breed dosing period (11 weeks)	September 14 - November 23, 1988
F1 adults paired for F2 mating	November 23, 1988
F1 mating period for F2 generation	November 24 - December 14, 1988
Delivery of F2 litters	December 15, 1988 - January 3, 1989
Weaning of F2 litters	January 5-24, 1989
Selection of F2 pups (necropsy only)	January 12-31, 1989
Necropsy of selected F2 weanlings	February 1, 1989
Euthanization of remaining F2 weanlings	February 2, 1989
Necropsy of F1 adult males	January 9-10, 1989
Necropsy of F1 adult females	January 5-25, 1989

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Figure 1. Study Design

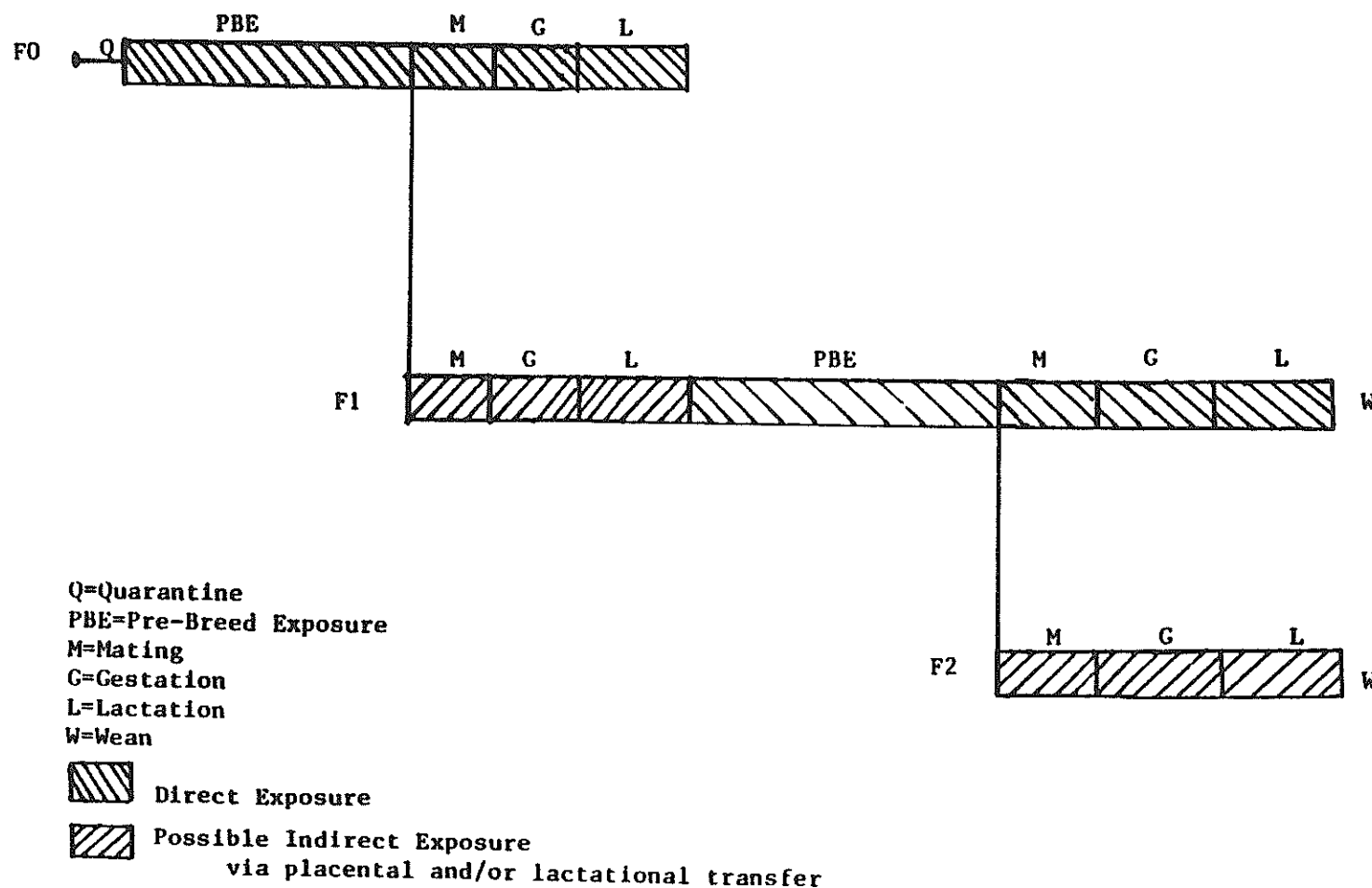


TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	FO ADULT MALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
NORMAL NO SIGNIFICANT CLINICAL OBSERVATIONS <sup>c</sup> (LOCATION NOT SPECIFIED) <sup>d</sup>	P	28( 0-118)	28( 0-118)	28( 0-118)	28( 0-118)
DEAD SCHEDULED SACRIFICE (LOCATION NOT SPECIFIED)	P	28(117-118)	28(117-118)	28(117-118)	28(117-118)
BEHAVIOR/CNS HYPOACTIVE(LOCATION NOT SPECIFIED)	P	0	0	1(106-110)	0
BODY DEHYDRATED(LOCATION NOT SPECIFIED)	P	0	1( 48- 54)	1(111-114)	1( 54- 73)
SWELLING		1	1	2	1
(LEG-HIND-BOTH)	P	0	0	1(110-118)	0
(NOSE)	P	1( 44- 45)	1( 54- 57)	1( 90- 91)	1 ( 74)
PALLOR(ENTIRE BODY)	P	0	0	1(105-117)	0
UROGENITAL DISCHARGE, RED (LOCATION NOT SPECIFIED)	P	1 ( 49)	1 ( 55)	0	0
CARDIO-PULMONARY COUGHING(LOCATION NOT SPECIFIED)	P	0	0	1 ( 39)	0
EYES/EARS/NOSE REDDENED EYES		0	2	1	0
(EYE-BOTH)	P	0	1( 70- 76)	0	0
(EYE-LEFT)	P	0	2( 63- 78)	1 ( 78)	0
(EYE-RIGHT)	P	0	1 ( 69)	0	0
PALE EYES(EYE-RIGHT)	P	1 ( 6)	0	0	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 2 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	FO ADULT MALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
EYES/EARS/NOSE					
OCULAR DISCHARGE <sup>c</sup>		0	3	1	2
(EYE-BOTH) <sup>d</sup>	P	0	1 ( 65- 78)	0	0
(EYE-LEFT)	P	0	2 ( 13- 77)	1 ( 63- 76)	0
(EYE-RIGHT)	P	0	2 ( 3- 50)	0	2 ( 5- 63)
NASAL DISCHARGE (LOCATION NOT SPECIFIED)	P	0	1 ( 43)	0	0
PERIOCTULAR ENCRUSTATION		2	7	6	4
(EYE-BOTH)	P	1 ( 57)	4 ( 8-118)	4 ( 2- 91)	3 ( 28- 75)
(EYE-LEFT)	P	1 ( 27- 30)	2 ( 9-117)	1 ( 64-117)	0
(EYE-RIGHT)	P	1 ( 54- 81)	5 ( 6-109)	4 ( 2-104)	4 ( 29- 82)
PERINASAL ENCRUSTATION (LOCATION NOT SPECIFIED)	P	3 ( 28- 61)	6 ( 6- 76)	4 ( 8-114)	6 ( 13- 82)
NASAL DISCHARGE, RED (LOCATION NOT SPECIFIED)	P	0	1 ( 54)	0	0
EXCRETA					
LOOSE FECES (LOCATION NOT SPECIFIED)	P	0	1 (118)	1 ( 95)	0
BLOOD IN URINE (BY HEMASTIX) (LOCATION NOT SPECIFIED)	P	0	0	1 (106)	0
ORAL/DENTAL					
OVERGROWN INCISORS (LOCATION NOT SPECIFIED)	P	0	1 ( 77)	1 ( 77)	0
ORAL LESION (LOCATION NOT SPECIFIED)	P	1 ( 54- 55)	0	2 ( 62- 95)	2 ( 58- 75)
MALOCCLUSION (LOCATION NOT SPECIFIED)	P	1 ( 54- 82)	0	3 ( 64-112)	2 ( 58-104)

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 2 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	FO ADULT MALES			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS) <sup>c</sup>	1000.0 (DAYS) <sup>d</sup>	2000.0 (DAYS) <sup>d</sup>
ORAL/DENTAL BROKEN INCISOR <sup>c</sup> (LOCATION NOT SPECIFIED) <sup>d</sup>	P	0	0	0	1(105-106)
SKIN ALOPECIA		2	0	2	1
(LEG-FRONT-BOTH)	P	0	0	0	1( 46-109)
(PAW-FORE-BOTH)	P	1 ( 32)	0	0	1( 30- 45)
(PAW-FORE-RIGHT)	P	1( 60- 62)	0	1( 34- 35)	0
(SHOULDER-RIGHT)	P	0	0	1( 26- 29)	0
EXCORIATED		0	0	3	1
(LEG-FRONT-BOTH)	P	0	0	1 ( 43)	0
(LEG-FORE-RIGHT)	P	0	0	2( 43- 48)	1( 19- 22)
(PAW-FORE-BOTH)	P	0	0	1( 19- 32)	0
(PAW-FORE-LEFT)	P	0	0	1( 21- 25)	0
(PAW-FORE-RIGHT)	P	0	0	1 ( 33)	0
(SHOULDER-RIGHT)	P	0	0	1( 19- 25)	0
CRUST(LEG-FORE-RIGHT)	P	0	0	1 ( 45)	0
NECROSIS(TAIL)	P	0	0	1(107-111)	0
NODULE-LEFT UPPER LIP (LOCATION NOT SPECIFIED)	P	1( 61-104)	0	0	0
PAPILLOMA-UPPER LEFT LIP (LOCATION NOT SPECIFIED)	P	1(105-118)	0	0	0
OTHER TIP OF TAIL MISSING (LOCATION NOT SPECIFIED)	P	0	0	0	1 ( 77)

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 2 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	FO ADULT MALES PPM				
	GRADE <sup>a</sup>	0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
OTHER					
ONE-HALF TAIL MISSING <sup>c</sup> (LOCATION NOT SPECIFIED) <sup>d</sup>	P	0	0	1(112-113)	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.



TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	FO ADULT FEMALES				
	GRADE <sup>a</sup>	0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
-----					
NORMAL					
NO SIGNIFICANT CLINICAL OBSERVATIONS <sup>c</sup> (LOCATION NOT SPECIFIED) <sup>d</sup>	P	28( 0-118)	28( 0-131)	28( 0-118)	28( 0-133)
DEAD					
SCHEDULED SACRIFICE (LOCATION NOT SPECIFIED)	P	28(114-118)	28(114-131)	28(113-118)	28(114-133)
BEHAVIOR/CNS					
PROLONGED DELIVERY (LOCATION NOT SPECIFIED)	P	0	0	1 ( 94)	0
BODY					
SWELLING		0	0	1	1
(FACE)	P	0	0	1( 62- 63)	0
(NOSE)	P	0	0	0	1( 69- 70)
URINE STAINS(LOCATION NOT SPECIFIED)	P	0	0	0	1( 70- 96)
TRAUMATIZED(NOSE)	P	0	0	0	1( 67- 68)
EYES/EARS/NOSE					
REDDENED EYES(EYE-LEFT)	P	0	0	0	1( 62- 66)
LACRIMATION		0	0	1	1
(EYE-BOTH)	P	0	0	0	1 (110)
(EYE-RIGHT)	P	0	0	1 ( 49)	0
OCULAR DISCHARGE		0	1	1	1
(EYE-LEFT)	P	0	0	0	1( 55- 66)
(EYE-RIGHT)	P	0	1( 77- 81)	1( 36- 63)	0
NASAL DISCHARGE (LOCATION NOT SPECIFIED)	P	0	1 ( 13)	0	0
-----					

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 3 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	FO ADULT FEMALES PPM			
		0.0	300.0	1000.0	2000.0
		(DAYS) <sup>b</sup>	(DAYS)	(DAYS)	(DAYS)
<hr/>					
EYES/EARS/NOSE					
SWOLLEN PERIOCCULAR TISSUE <sup>c</sup> (EYE-RIGHT) <sup>d</sup>	P	0	0	1 (102)	0
PERIOCCULAR ENCRUSTATION		1	2	1	2
(EYE-BOTH)	P	0	0	0	1( 67-117)
(EYE-LEFT)	P	0	1( 35- 37)	0	1( 49- 61)
(EYE-RIGHT)	P	1( 5- 7)	1( 6-115)	1( 35-116)	1( 76- 81)
EXCRETA					
LOOSE FECES(LOCATION NOT SPECIFIED)	P	0	0	1 (113)	0
ORAL/DENTAL					
OVERGROWN INCISORS (LOCATION NOT SPECIFIED)	P	0	1( 85-100)	0	2( 76-100)
ORAL LESION(LOCATION NOT SPECIFIED)	P	1( 5- 8)	1(100-101)	0	0
MALOCCLUSION(LOCATION NOT SPECIFIED)	P	0	1( 6- 18)	0	1( 67- 82)
PERIORAL ENCRUSTATION (LOCATION NOT SPECIFIED)	P	0	0	0	1( 67- 72)
<hr/>					

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 3 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	FO ADULT FEMALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
SKIN					
ALOPECIA <sup>c</sup>		7	5	2	1
(FACE) <sup>d</sup>	P	0	0	1( 74- 76)	0
(LEG-FRONT-BOTH)	P	6( 11-117)	3( 57-116)	1( 45-117)	0
(LEG-FORE-LEFT)	P	1( 54- 57)	3( 56- 88)	0	1( 70- 89)
(LEG-FORE-RIGHT)	P	1( 9- 25)	0	0	0
(PAW-FORE-BOTH)	P	2( 7-116)	1( 19- 97)	1( 20- 44)	0
(PAW-FORE-RIGHT)	P	4( 6- 89)	1( 27- 28)	0	0
(SHOULDER-LEFT)	P	0	1( 16- 18)	0	0
EXCORIATED		1	2	1	0
(LEG-FRONT-BOTH)	P	1( 11- 15)	0	0	0
(LEG-FORE-LEFT)	P	0	1(105-106)	0	0
(LEG-FORE-RIGHT)	P	1( 5- 10)	0	0	0
(PAW-FORE-LEFT)	P	0	0	1( 14- 15)	0
(SHOULDER-LEFT)	P	0	1( 3- 20)	0	0
CRUST		1	0	1	0
(FACE)	P	0	0	1( 62- 73)	0
(MOUTH)	P	0	0	1( 62- 69)	0
(SHOULDER-LEFT)	P	1( 23- 40)	0	0	0
SCAR(FACE)	P	0	0	1( 77- 78)	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

Table 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DINETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT (GRAMS)

FO ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0				
MEAN	212.2	212.6	213.4	212.5
S.D.	7.16	8.06	7.55	8.22
N	28	28	28	28
WEEK 1				
MEAN	265.3	267.3	269.4	261.9
S.D.	9.09	12.12	9.11	12.56
N	28	28	28	28
WEEK 2				
MEAN	314.3	315.3	320.2	309.0
S.D.	10.81	16.24	11.92	15.45
N	28	28	28	28
WEEK 3				
MEAN	349.1	351.5	358.9*	341.0
S.D.	12.86	22.52	15.26	20.84
N	28	28	28	28
WEEK 4				
MEAN	375.3	380.3	390.4**	367.8
S.D.	15.32	27.71	18.34	24.65
N	28	28	28	28
WEEK 5				
MEAN	400.7	408.2	414.6*	388.3
S.D.	18.48	31.08	19.43	28.53
N	28	28	28	28
WEEK 6				
MEAN	424.3	432.9	438.2	408.2
S.D.	21.21	34.06	21.57	31.57
N	28	28	28	28
WEEK 7				
MEAN	442.9	451.2	460.4*	428.6
S.D.	22.58	39.77	23.72	35.66
N	28	28	28	28
WEEK 8				
MEAN	457.7	464.0	479.3**	443.4
S.D.	25.02	44.39	24.25	37.76
N	28	28	28	28
WEEK 9				
MEAN	477.5	484.6	495.5*	459.2
S.D.	27.44	43.55	25.52	42.38
N	28	28	28	28
WEEK 10				
MEAN	490.4	497.3	506.4	470.5
S.D.	29.15	44.22	27.55	45.65
N	28	28	28	28
WEEK 11				
MEAN	495.3	500.6	507.3	474.6
S.D.	28.38	45.03	27.96	41.50
N	28	28	28	28
WEEK 12				
MEAN	507.4	512.5	521.5	486.0
S.D.	29.83	47.11	32.22	43.72
N	28	28	28	28
WEEK 13				
MEAN	518.0	523.9	531.1	497.4
S.D.	32.90	49.29	36.10	45.90
N	28	28	28	28
WEEK 14				
MEAN	522.5	531.2	541.3	502.1
S.D.	32.85	49.10	36.39	47.22
N	28	28	28	28

\* Significantly different from control group (p < .05)

\*\* Significantly different from control group (p < .01)

Table 4 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT (GRAMS)

FO ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 15				
MEAN	533.3	544.7	550.7	513.3
S.D.	33.87	51.36	41.69	48.78
N	28	28	28	28
WEEK 16				
MEAN	547.4	558.2	562.8	525.3
S.D.	36.05	55.33	45.28	49.06
N	28	28	28	28
WEEK 17				
MEAN	553.5	564.3	571.0	534.0
S.D.	36.65	57.20	45.41	52.82
N	28	28	28	28
None significantly different from control group				

Table 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT GAIN (GRAMS)

FO ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN	53.1	54.7	56.0*	49.4
S.D.	3.92	5.13	4.68	7.24
N	28	28	28	28
WEEK 1 TO 2				
MEAN	49.0	48.0	50.7	47.2
S.D.	4.95	6.75	6.38	5.22
N	28	28	28	28
WEEK 2 TO 3				
MEAN	34.8	36.2	38.7	31.9
S.D.	6.56	7.95	6.26	7.37
N	28	28	28	28
WEEK 3 TO 4				
MEAN	26.2	28.8	31.6**	26.8
S.D.	5.14	7.43	5.36	6.89
N	28	28	28	28
WEEK 4 TO 5				
MEAN	25.4	27.9	24.2	20.5**
S.D.	5.39	6.63	5.28	6.34
N	28	28	28	28
WEEK 5 TO 6				
MEAN	23.6	24.8	23.6	19.9
S.D.	5.43	6.68	4.64	4.32
N	28	28	28	28
WEEK 6 TO 7				
MEAN	18.6	18.3	22.2	20.3
S.D.	4.64	14.18	4.51	6.18
N	28	28	28	28
WEEK 7 TO 8				
MEAN	14.8	12.8	18.9	14.8
S.D.	5.04	13.51	4.98	8.84
N	28	28	28	28
WEEK 8 TO 9				
MEAN	19.8	20.6	16.2	15.8
S.D.	4.85	10.43	7.26	7.33
N	28	28	28	28
WEEK 9 TO 10				
MEAN	13.0	12.7	11.0	11.3
S.D.	3.60	5.36	5.02	6.85
N	28	28	28	28
WEEK 10 TO 11				
MEAN	4.9	3.3	0.9	4.0
S.D.	6.01	5.51	6.08	10.77
N	28	28	28	28
WEEK 11 TO 12				
MEAN	12.1	12.0	14.2	11.4
S.D.	5.33	4.47	7.65	5.51
N	28	28	28	28
WEEK 12 TO 13				
MEAN	10.5	11.4	9.5	11.4
S.D.	5.00	3.96	10.67	6.16
N	28	28	28	28
WEEK 13 TO 14				
MEAN	4.5	7.2	10.2**	4.7
S.D.	4.18	5.18	8.19	4.42
N	28	28	28	28
WEEK 14 TO 15				
MEAN	10.9	13.6	9.4	11.1
S.D.	5.63	7.09	10.63	4.84
N	28	28	28	28

\* Significantly different from control group (p < .05)

\*\* Significantly different from control group (p < .01)

Table 5 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT GAIN (GRAMS)

FO ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 15 TO 16				
MEAN	14.1	13.5	12.1	12.0
S.D.	4.66	8.09	6.68	4.58
N	28	28	28	28
WEEK 16 TO 17				
MEAN	6.1	6.1	8.2	8.7
S.D.	3.75	3.75	7.91	5.79
N	28	28	28	28
None significantly different from control group				

Table 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT (GRAMS)

F0 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0				
MEAN	150.2	149.0	148.3	149.8
S.D.	4.28	6.09	4.49	6.37
N	28	28	28	28
WEEK 1				
MEAN	171.7	169.9	173.0	170.3
S.D.	7.24	9.72	7.37	9.25
N	28	28	28	28
WEEK 2				
MEAN	189.6	188.1	189.6	184.3
S.D.	11.59	10.13	9.46	10.78
N	28	28	28	28
WEEK 3				
MEAN	202.1	200.5	203.7	196.4
S.D.	11.03	11.42	11.78	10.97
N	28	28	28	28
WEEK 4				
MEAN	214.3	210.8	216.7	206.4
S.D.	11.89	14.22	12.50	10.73
N	28	28	28	28
WEEK 5				
MEAN	222.2	224.4	227.7	212.4*
S.D.	13.37	14.67	15.13	11.89
N	28	28	28	28
WEEK 6				
MEAN	233.0	236.7	235.7	222.8*
S.D.	14.76	16.17	16.70	12.49
N	28	28	28	28
WEEK 7				
MEAN	242.9	248.6	249.5	233.1
S.D.	15.12	17.34	19.29	13.36
N	28	28	28	28
WEEK 8				
MEAN	250.6	254.9	255.2	244.1
S.D.	14.88	18.48	19.66	13.08
N	28	28	28	28
WEEK 9				
MEAN	259.3	263.1	260.8	247.4*
S.D.	14.14	17.93	20.84	14.43
N	28	28	28	28
WEEK 10				
MEAN	262.4	270.0	264.0	248.0*
S.D.	16.81	17.97	23.13	17.45
N	28	28	28	28

\* Significantly different from control group (p < .05)



Table 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT GAIN (GRAMS)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN	21.4	20.9	24.7	20.5
S.D.	5.86	6.86	5.35	7.00
N	28	28	28	28
WEEK 1 TO 2				
MEAN	17.9	18.2	16.6	14.0
S.D.	7.35	7.15	5.62	5.70
N	28	28	28	28
WEEK 2 TO 3				
MEAN	12.5	12.4	14.1	12.1
S.D.	6.44	6.86	5.83	4.58
N	28	28	28	28
WEEK 3 TO 4				
MEAN	12.3	10.3	13.1	10.0
S.D.	5.17	6.23	7.68	4.44
N	28	28	28	28
WEEK 4 TO 5				
MEAN	7.9	13.6**	11.0	6.0
S.D.	5.79	4.80	5.98	6.54
N	28	28	28	28
WEEK 5 TO 6				
MEAN	10.8	12.3	8.1	10.4
S.D.	5.40	5.72	4.76	6.55
N	28	28	28	28
WEEK 6 TO 7				
MEAN	9.9	11.9	13.8	10.3
S.D.	5.84	5.40	6.57	7.54
N	28	28	28	28
WEEK 7 TO 8				
MEAN	7.7	6.3	5.6	11.0
S.D.	5.98	5.21	5.42	7.06
N	28	28	28	28
WEEK 8 TO 9				
MEAN	8.7	8.2	5.7	3.3**
S.D.	4.16	5.79	7.32	4.29
N	28	28	28	28
WEEK 9 TO 10				
MEAN	3.1	6.8	3.2	0.5
S.D.	5.91	5.40	6.80	13.10
N	28	28	28	28

\*\* Significantly different from control group (p < .01)

FIGURE 2  
TWO-GENERATION REPRODUCTION STUDY OF ADBAC  
ADMINISTERED IN THE DIET TO CD (SPRAGUE-DAWLEY) RATS  
MEAN BODY WEIGHTS VERSUS TIME  
F0 ADULT MALES

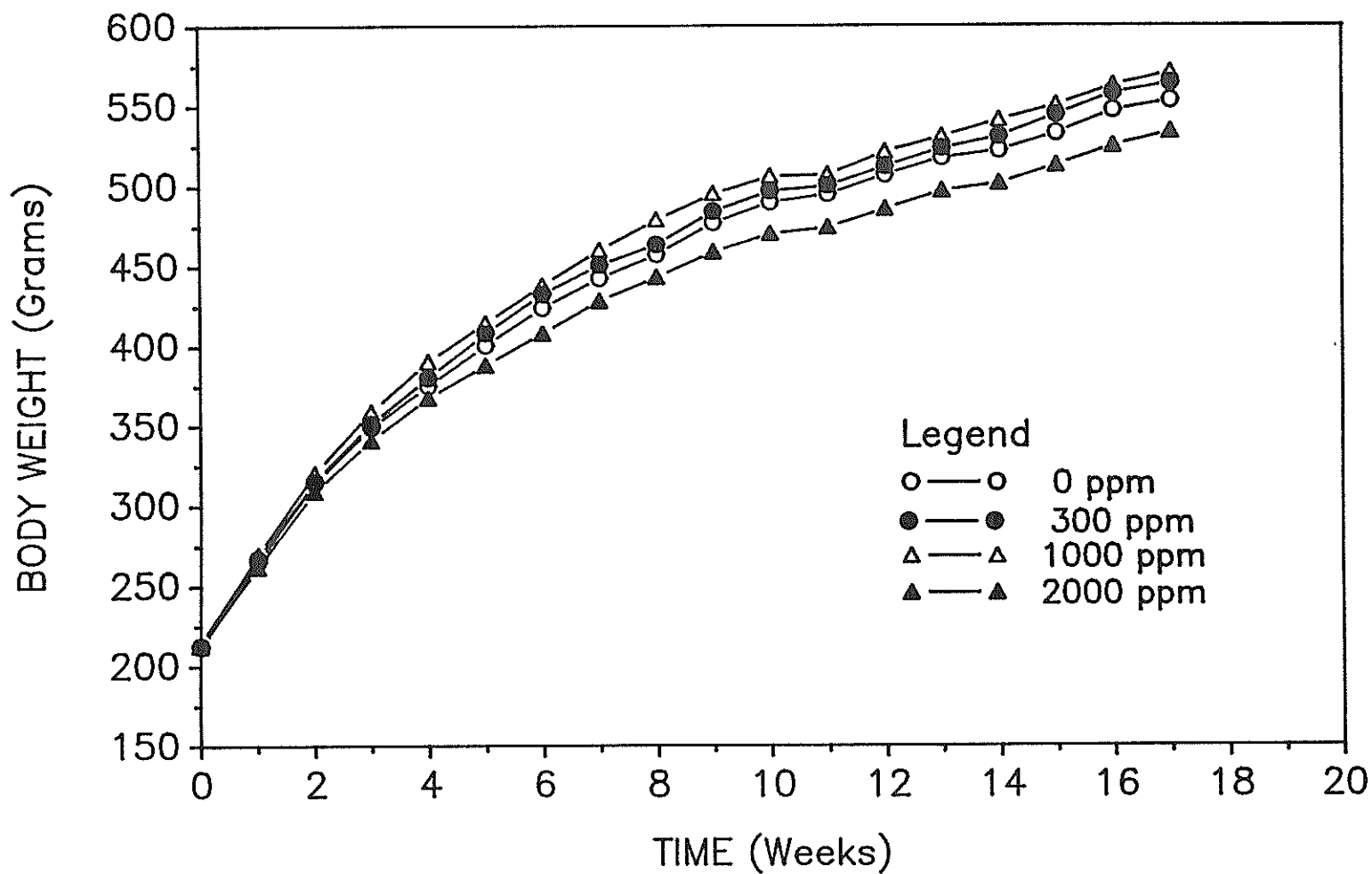


FIGURE 3  
TWO-GENERATION REPRODUCTION STUDY OF ADBAC ADMINISTERED  
IN THE DIET TO CD (SPRAGUE-DAWLEY) RATS  
MEAN BODY WEIGHTS VERSUS TIME  
FO ADULT FEMALES

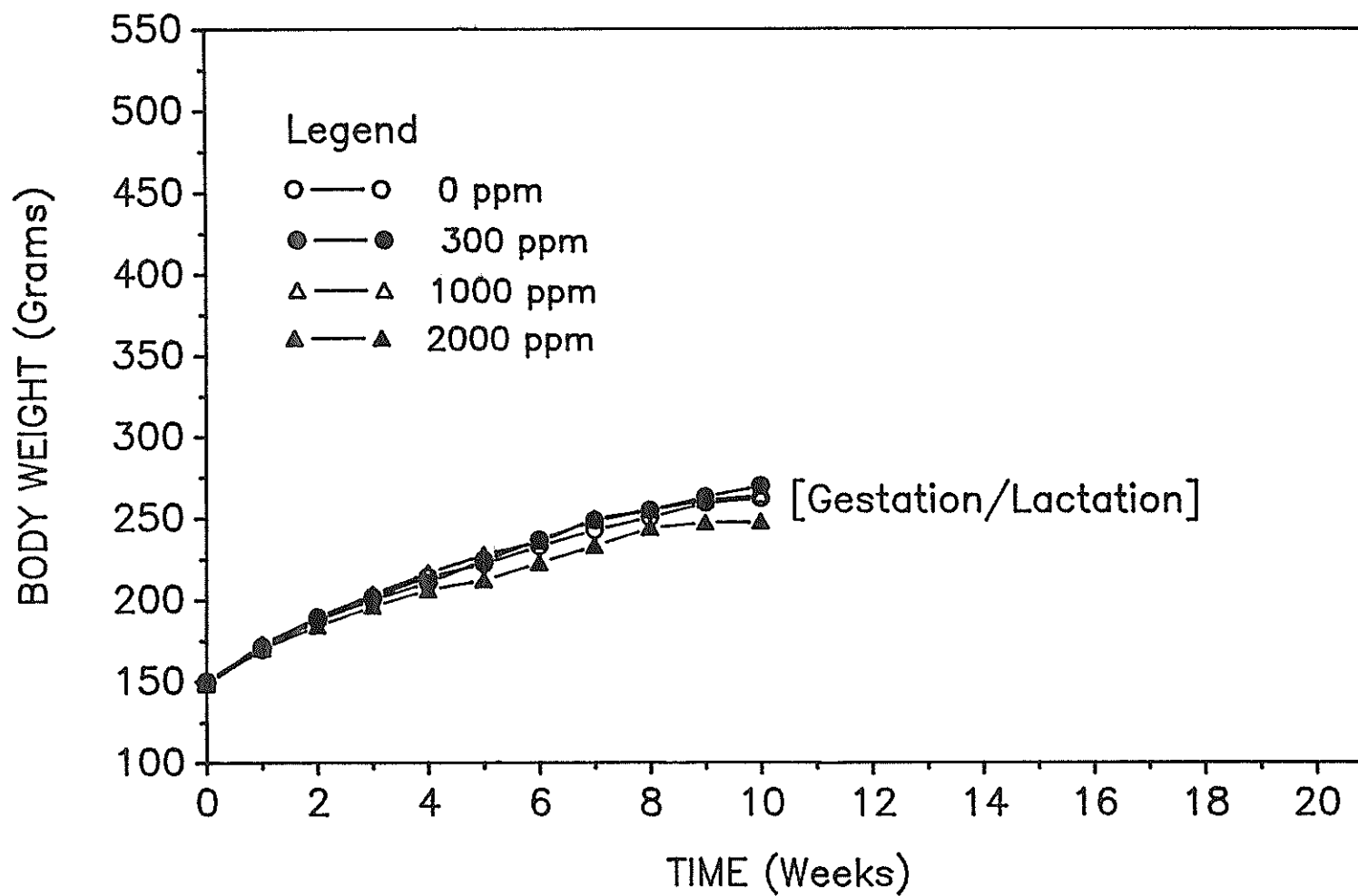


Table 8  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN	24.2	24.7	24.7	22.3**
S.D.	1.48	1.81	1.41	1.98
N	28	28	28	26
WEEK 1 TO 2				
MEAN	25.1	25.4	25.5	24.5
S.D.	1.37	1.80	1.41	1.55
N	26	26	24	25
WEEK 2 TO 3				
MEAN	25.7	25.6	25.5	24.5
S.D.	1.65	2.31	1.90	2.07
N	28	28	28	28
WEEK 3 TO 4				
MEAN	25.5	25.8	26.1	24.9
S.D.	1.49	2.34	1.71	2.20
N	28	28	28	28
WEEK 4 TO 5				
MEAN	25.4	26.2	25.8	24.6
S.D.	1.67	2.56	1.69	2.19
N	28	28	28	28
WEEK 5 TO 6				
MEAN	25.8	26.6	26.1	24.5
S.D.	1.80	2.56	1.82	2.10
N	28	28	28	28
WEEK 6 TO 7				
MEAN	25.4	25.7	26.3	24.5
S.D.	1.60	4.35	2.00	2.24
N	28	28	28	28
WEEK 7 TO 8				
MEAN	25.2	25.5	26.5*	24.9
S.D.	1.73	3.31	1.54	2.15
N	27	28	27	27
WEEK 8 TO 9				
MEAN	25.1	26.0	26.6**	24.1
S.D.	1.80	2.93	1.54	2.42
N	28	28	28	28
WEEK 9 TO 10				
MEAN	25.7	26.5	26.3	24.3
S.D.	1.82	2.29	1.52	2.94
N	28	28	28	28
WEEK 13 TO 14				
MEAN	24.8	26.5*	26.2*	25.0
S.D.	1.66	2.52	2.21	2.33
N	28	28	28	28
WEEK 14 TO 15				
MEAN	20.2	20.5	18.7	20.7
S.D.	6.03	7.65	7.76	7.64
N	28	28	28	28
WEEK 15 TO 16				
MEAN	26.9	26.9	26.6	26.2
S.D.	2.61	2.89	2.79	2.72
N	28	28	28	28

\* Significantly different from control group (p < .05)

\*\* Significantly different from control group (p < .01)

TABLE 9  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF TEST MATERIAL CONSUMPTION (MG/KG/DAY)

FO ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN		30.9	102.4	187.6
S.D.		1.27	4.41	11.17
N		28	28	26
WEEK 1 TO 2				
MEAN		26.3	87.0	172.1
S.D.		1.01	3.70	7.24
N		26	24	25
WEEK 2 TO 3				
MEAN		23.0	75.2	150.5
S.D.		1.06	3.48	6.93
N		28	28	28
WEEK 3 TO 4				
MEAN		21.1	69.6	140.5
S.D.		0.89	2.77	7.40
N		28	28	28
WEEK 4 TO 5				
MEAN		20.0	64.1	130.0
S.D.		0.98	2.96	6.26
N		28	28	28
WEEK 5 TO 6				
MEAN		19.0	61.3	123.3
S.D.		1.12	3.15	5.48
N		28	28	28
WEEK 6 TO 7				
MEAN		17.4	58.4	117.1
S.D.		2.44	3.79	5.51
N		28	28	28
WEEK 7 TO 8				
MEAN		16.7	56.5	114.2
S.D.		1.49	2.90	5.73
N		28	27	27
WEEK 8 TO 9				
MEAN		16.4	54.6	107.1
S.D.		1.22	2.89	6.37
N		28	28	28
WEEK 9 TO 10				
MEAN		16.2	52.6	104.7
S.D.		0.85	2.55	8.58
N		28	28	28
GRAND MEAN				
MEAN		20.7	68.2	134.7
S.D.		4.81	15.97	27.94
N		10	10	10

Table 10  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN	17.5	17.2	17.0	15.9**
S.D.	1.28	1.03	0.94	1.25
N	28	28	28	28
WEEK 1 TO 2				
MEAN	17.7	17.5	17.2	16.7*
S.D.	1.36	1.49	1.42	1.30
N	28	27	28	28
WEEK 2 TO 3				
MEAN	17.6	17.4	16.8	16.4**
S.D.	1.26	1.35	1.18	1.44
N	28	28	28	28
WEEK 3 TO 4				
MEAN	17.9	17.6	17.3	16.8*
S.D.	1.44	1.20	1.63	1.56
N	28	28	28	28
WEEK 4 TO 5				
MEAN	17.5	18.6*	17.7	17.1
S.D.	1.42	1.28	1.57	2.07
N	27	28	28	28
WEEK 5 TO 6				
MEAN	18.5	19.4	18.2	17.5
S.D.	1.53	1.43	1.87	1.27
N	28	28	28	27
WEEK 6 TO 7				
MEAN	18.7	19.2	18.7	17.7
S.D.	1.88	1.48	1.60	1.45
N	28	28	28	25
WEEK 7 TO 8				
MEAN	18.8	19.0	18.2	18.6
S.D.	1.88	1.05	1.36	1.75
N	28	28	27	27
WEEK 8 TO 9				
MEAN	18.8	18.9	17.9	18.0
S.D.	1.45	1.17	1.54	1.69
N	28	27	28	26
WEEK 9 TO 10				
MEAN	18.0	18.6	17.5	17.2
S.D.	1.34	1.24	1.23	2.05
N	27	28	28	28

\* Significantly different from control group (p < .05)

\*\* Significantly different from control group (p < .01)

TABLE 11  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF TEST MATERIAL CONSUMPTION (MG/KG/DAY)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN		32.4	105.9	198.5
S.D.		1.32	6.32	10.34
N		28	28	28
WEEK 1 TO 2				
MEAN		29.3	94.8	188.5
S.D.		2.32	7.03	10.97
N		27	28	28
WEEK 2 TO 3				
MEAN		26.9	85.7	172.0
S.D.		1.65	6.23	13.94
N		28	28	28
WEEK 3 TO 4				
MEAN		25.7	82.4	167.0
S.D.		1.51	6.95	14.67
N		28	28	28
WEEK 4 TO 5				
MEAN		25.7	79.9	163.0
S.D.		1.42	5.93	18.75
N		28	28	28
WEEK 5 TO 6				
MEAN		25.2	78.6	160.9
S.D.		1.53	6.88	10.30
N		28	28	27
WEEK 6 TO 7				
MEAN		23.8	77.3	156.6
S.D.		1.83	4.92	13.51
N		28	28	25
WEEK 7 TO 8				
MEAN		22.7	72.2	156.3
S.D.		1.49	4.56	13.63
N		28	27	27
WEEK 8 TO 9				
MEAN		22.0	69.6	145.6
S.D.		1.89	6.20	10.37
N		27	28	26
WEEK 9 TO 10				
MEAN		21.0	67.0	138.7
S.D.		1.81	4.67	15.80
N		28	28	28
GRAND MEAN				
MEAN		25.5	81.3	164.7
S.D.		3.45	11.82	18.13
N		10	10	10

Table 12

Reproductive Parameters for F0 Parents at F1 Breed

	<u>Alkyl Dimethyl Benzyl Ammonium Chloride (ppm, in diet)</u>			
	<u>0</u>	<u>300</u>	<u>1000</u>	<u>2000</u>
No. F0 pairs at study start	28	28	28	28
No. F0 pairs at start of F1 breed	28	28	28	28
No. plug-/sperm-positive females	28	28	28	27
No. pregnant	28	27	28	27
No. live litters on postnatal day 0	28	27	28	27
Gestational length (days) <sup>a</sup>	22.0 ± 0.0	22.0 ± 0.0	22.0 ± 0.3	22.0 ± 0.0
<u>INDICES<sup>b</sup></u>				
Mating Index (males, females)	100.0	100.0	100.0	96.4
Fertility Index (male and female)	100.0	96.4	100.0	100.0
Gestational Index	100.0	100.0	100.0	100.0

<sup>a</sup> The values are presented as mean ± 1 standard deviation.

<sup>b</sup> The indices are defined in the text.

PATH/esk/1801P-2  
09-11-89



Table 13  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF GESTATIONAL BODY WEIGHT AND WEIGHT CHANGE (GRAMS)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>GESTATIONAL BODY WEIGHTS (g)</u>				
DAY 0				
MEAN	264.32	266.59	265.57	251.82*
S.D.	14.414	18.218	18.838	14.363
N	28	27	28	27
DAY 6				
MEAN	287.23	286.16	293.37	273.51
S.D.	15.667	17.880	20.494	21.402
N	23	20	22	18
DAY 15				
MEAN	323.36	323.88	327.42	313.77
S.D.	17.641	20.038	23.351	16.162
N	28	27	28	27
DAY 20				
MEAN	384.38	384.42	389.75	371.72
S.D.	23.123	23.388	32.907	19.937
N	28	27	28	27
<u>GESTATIONAL BODY WEIGHT CHANGES (g)</u>				
DAY 0 TO 6				
MEAN	23.22	22.73	26.82	22.09
S.D.	5.348	4.132	5.439	14.961
N	23	20	22	18
DAY 6 TO 15				
MEAN	35.08	34.32	35.80	39.39
S.D.	6.195	5.931	6.396	12.374
N	23	20	22	18
DAY 15 TO 20				
MEAN	61.02	60.54	62.33	57.95
S.D.	11.274	10.380	11.785	8.762
N	28	27	28	27
DAY 0 TO 20 (GESTATION)				
MEAN	120.06	117.83	124.18	119.90
S.D.	16.972	14.238	18.476	13.926
N	28	27	28	27

\* Significantly different from control group (p < .05)

The N is reduced because body weights were inadvertently not obtained for some animals on gestational day 6.

Table 14  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF GESTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
DAY 0 TO 4				
MEAN	20.77	20.63	21.22	20.44
S.D.	1.767	1.562	1.460	2.793
N	28	27	28	27
DAY 4 TO 7				
MEAN	22.25	21.81	21.92	21.62
S.D.	1.694	1.783	1.508	2.964
N	28	27	28	27
DAY 7 TO 11				
MEAN	22.89	22.38	22.65	22.15
S.D.	1.853	1.915	1.542	2.219
N	28	26	28	27
DAY 11 TO 14				
MEAN	23.15	22.99	22.04	22.29
S.D.	1.869	1.721	3.637	1.783
N	28	27	28	27
DAY 14 TO 17				
MEAN	23.56	23.29	23.41	23.29
S.D.	1.620	1.558	1.940	2.130
N	28	27	28	27
DAY 17 TO 20				
MEAN	25.14	24.70	25.34	24.71
S.D.	1.927	1.657	1.871	1.839
N	28	27	28	27
DAY 0 TO 7				
MEAN	21.40	21.14	21.52	20.95
S.D.	1.690	1.597	1.404	2.836
N	28	27	28	27
DAY 7 TO 14				
MEAN	23.00	22.61	22.39	22.21
S.D.	1.758	1.672	2.109	1.875
N	28	26	28	27
DAY 14 TO 20				
MEAN	24.35	23.99	24.38	24.00
S.D.	1.657	1.519	1.841	1.818
N	28	27	28	27
None significantly different from control group				
The N is reduced due to food spillage.				

Table 15  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LACTATIONAL BODY WEIGHT AND WEIGHT CHANGE (GRAMS)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>LACTATIONAL BODY WEIGHTS (g)</u>				
DAY 0				
MEAN	296.39	298.95	298.68	283.14
S.D.	18.650	22.030	19.911	20.420
N	28	27	28	27
DAY 7				
MEAN	307.17	307.53	310.66	306.64
S.D.	13.747	17.423	16.258	16.450
N	28	27	28	27
DAY 14				
MEAN	319.10	322.24	327.64	324.95
S.D.	13.542	16.739	19.267	17.838
N	28	27	28	27
DAY 21				
MEAN	309.98	309.09	319.80	328.23**
S.D.	13.193	16.446	17.278	19.542
N	28	27	28	27
<u>LACTATIONAL BODY WEIGHT CHANGES (g)</u>				
DAY 0 TO 7				
MEAN	10.78	8.57	11.98	23.50**
S.D.	13.919	11.109	10.283	12.264
N	28	27	28	27
DAY 7 TO 14				
MEAN	11.93	14.72	16.98	18.31*
S.D.	7.859	6.674	9.290	8.947
N	28	27	28	27
DAY 14 TO 21				
MEAN	-9.12	-13.15	-7.84	3.27**
S.D.	9.917	6.480	10.546	10.199
N	28	27	28	27
DAY 0 TO 21 (LACTATION)				
MEAN	13.59	10.14	21.12	45.08**
S.D.	17.287	16.055	18.283	15.221
N	28	27	28	27
* Significantly different from control group (p < .05)				
** Significantly different from control group (p < .01)				

Table 16  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
DAY 0 TO 4				
MEAN	25.03	23.74	25.20	26.70
S.D.	5.794	4.297	4.298	4.167
N	28	27	28	27
DAY 4 TO 7				
MEAN	36.82	36.98	37.03	38.41
S.D.	3.922	3.791	3.061	4.308
N	28	27	28	27
DAY 7 TO 10				
MEAN	46.42	47.27	46.21	47.20
S.D.	5.299	4.357	3.853	5.116
N	28	27	28	27
DAY 10 TO 14				
MEAN	53.94	54.37	54.74	54.81
S.D.	6.069	4.419	5.326	5.531
N	28	27	28	27
DAY 0 TO 7				
MEAN	30.08	29.42	30.27	31.72
S.D.	4.733	3.584	3.205	3.837
N	28	27	28	27
DAY 7 TO 14				
MEAN	50.72	51.33	51.08	51.55
S.D.	5.470	4.240	4.602	5.217
N	28	27	28	27
None significantly different from control group				

Table 17  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LITTER VIABILITY

F1 PUPS				
GROUP: PPH	0.0	300.0	1000.0	2000.0
<u>LACTATIONAL DAY 0</u>				
TOTAL BORN	375	348	374	346
TOTAL BORN ALIVE	366	335	371	343
NO. STILLBORN	9	13	3	3
<u>LACTATIONAL DAY 4 (PRECULL)</u>				
NO. ALIVE	359	330	362	339
NO. DEAD (DAYS 0 TO 4 PRECULL)	7	5	9	4
<u>LACTATIONAL DAY 4 (POSTCULL)</u>				
NO. ALIVE	218	213	220	214
<u>LACTATIONAL DAY 7</u>				
NO. ALIVE	218	213	220	214
NO. DEAD (DAYS 4 POSTCULL TO 7)	0	0	0	0
<u>LACTATIONAL DAY 14</u>				
NO. ALIVE	218	213	220	214
NO. DEAD (DAYS 7 TO 14)	0	0	0	0
NO. DEAD (DAYS 4 POSTCULL TO 14)	0	0	0	0
<u>LACTATIONAL DAY 21</u>				
NO. ALIVE	216	213	220	214
NO. DEAD (DAYS 14 TO 21)	2	0	0	0
NO. DEAD (DAYS 4 POSTCULL TO 21)	2	0	0	0
<u>LACTATIONAL DAY 28<sup>a</sup></u>				
NO. ALIVE	215	213	220	214
NO. DEAD (DAYS 21 TO 28)	1	0	0	0
NO. DEAD (DAYS 4 POSTCULL TO 28)	3	0	0	0

None significantly different from control group  
<sup>a</sup> Litters were weaned on lactational day 21.

Table 18  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LITTER SIZE AND SEX RATIO

		F1 PUPS			
GROUP: PPM	0.0	300.0	1000.0	2000.0	
<u>LACTATIONAL DAY 0</u>					
TOTAL BORN/LITTER					
MEAN	13.4	12.9	13.4	12.8	
S.D.	3.01	2.61	3.28	2.27	
N	28	27	28	27	
TOTAL BORN ALIVE/LITTER					
MEAN	13.1	12.4	13.3	12.7	
S.D.	3.08	2.39	3.31	2.28	
N	28	27	28	27	
SEX RATIO					
MEAN	49.9	49.4	50.3	52.7	
S.D.	15.31	15.71	14.21	11.44	
N	28	27	28	27	
<u>LACTATIONAL DAY 4 (PRECULL)</u>					
LITTER SIZE					
MEAN	12.8	12.2	12.9	12.6	
S.D.	3.19	2.39	3.20	2.28	
N	28	27	28	27	
SEX RATIO					
MEAN	49.8	49.6	50.4	53.3	
S.D.	15.09	15.46	13.87	11.61	
N	28	27	28	27	
<u>LACTATIONAL DAY 4 (POSTCULL)</u>					
LITTER SIZE					
MEAN	7.8	7.9	7.9	7.9	
S.D.	0.69	0.58	0.76	0.38	
N	28	27	28	27	
SEX RATIO					
MEAN	49.6	49.4	50.9	50.5	
S.D.	9.79	9.39	5.82	5.46	
N	28	27	28	27	
<u>LACTATIONAL DAY 7</u>					
LITTER SIZE					
MEAN	7.8	7.9	7.9	7.9	
S.D.	0.69	0.58	0.76	0.38	
N	28	27	28	27	
SEX RATIO					
MEAN	49.6	49.4	50.9	50.5	
S.D.	9.79	9.39	5.82	5.46	
N	28	27	28	27	
<u>LACTATIONAL DAY 14</u>					
LITTER SIZE					
MEAN	7.8	7.9	7.9	7.9	
S.D.	0.69	0.58	0.76	0.38	
N	28	27	28	27	
SEX RATIO					
MEAN	49.6	49.4	50.9	50.5	
S.D.	9.79	9.39	5.82	5.46	
N	28	27	28	27	
<u>LACTATIONAL DAY 21</u>					
LITTER SIZE					
MEAN	7.7	7.9	7.9	7.9	
S.D.	0.71	0.58	0.76	0.38	
N	28	27	28	27	
SEX RATIO					
MEAN	50.1	49.4	50.9	50.5	
S.D.	9.99	9.39	5.82	5.46	
N	28	27	28	27	
None significantly different from control group					

Table 18 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LITTER SIZE AND SEX RATIO

F1 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>LACTATIONAL DAY 28<sup>a</sup></u>				
LITTER SIZE				
MEAN	7.7	7.9	7.9	7.9
S.D.	0.72	0.58	0.76	0.38
N	28	27	28	27
SEX RATIO				
MEAN	50.3	49.4	50.9	50.5
S.D.	10.08	9.39	5.82	5.46
N	28	27	28	27
None significantly different from control group				
<sup>a</sup> Litters were weaned on lactational day 21.				

Table 19  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP BODY WEIGHT AND WEIGHT CHANGE (GRAMS) PER LITTER

F1 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>PUP BODY WEIGHTS (g)</u>				
<u>LACTATIONAL DAY 1</u>				
ENTIRE LITTER				
MEAN	6.75	6.89	6.86	6.84
S.D.	0.714	0.575	0.823	0.537
N	28	27	28	27
MALE PUPS				
MEAN	6.93	7.09	7.00	7.00
S.D.	0.758	0.634	0.845	0.541
N	28	27	28	27
FEMALE PUPS				
MEAN	6.56	6.69	6.72	6.65
S.D.	0.727	0.548	0.825	0.511
N	28	27	28	27
<u>LACTATIONAL DAY 4 (PRE CULL)</u>				
ENTIRE LITTER				
MEAN	9.92	10.21	10.09	9.99
S.D.	1.210	0.923	1.413	0.860
N	28	27	28	27
MALE PUPS				
MEAN	10.09	10.46	10.24	10.17
S.D.	1.275	0.990	1.417	0.880
N	28	27	28	27
FEMALE PUPS				
MEAN	9.71	9.96	9.95	9.76
S.D.	1.228	0.900	1.403	0.831
N	28	27	28	27
<u>LACTATIONAL DAY 4 (POST CULL)</u>				
ENTIRE LITTER				
MEAN	9.95	10.22	10.11	9.98
S.D.	1.205	0.914	1.390	0.855
N	28	27	28	27
MALE PUPS				
MEAN	10.12	10.51	10.26	10.18
S.D.	1.295	0.967	1.403	0.884
N	28	27	28	27
FEMALE PUPS				
MEAN	9.77	9.94	9.96	9.76
S.D.	1.201	0.934	1.390	0.817
N	28	27	28	27
<u>LACTATIONAL DAY 7</u>				
ENTIRE LITTER				
MEAN	16.10	16.64	16.61	16.27
S.D.	1.672	1.073	1.656	1.066
N	28	27	28	27
MALE PUPS				
MEAN	16.35	17.01	16.89	16.56
S.D.	1.772	1.107	1.722	1.065
N	28	27	28	27
FEMALE PUPS				
MEAN	15.85	16.24	16.32	15.96
S.D.	1.719	1.158	1.629	1.107
N	28	27	28	27
<u>LACTATIONAL DAY 14</u>				
ENTIRE LITTER				
MEAN	33.99	34.52	34.40	33.28
S.D.	3.267	1.888	2.825	2.320
N	28	27	28	27
MALE PUPS				
MEAN	34.51	35.32	34.89	33.85
S.D.	3.185	1.951	2.775	2.314
N	28	27	28	27

None significantly different from control group



Table 19 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP BODY WEIGHT AND WEIGHT CHANGE (GRAMS) PER LITTER

F1 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>FEMALE PUPS</u>				
MEAN	33.47	33.69	33.89	32.68
S.D.	3.472	2.033	2.930	2.386
N	28	27	28	27
<u>LACTATIONAL DAY 21</u>				
<u>ENTIRE LITTER</u>				
MEAN	54.76	55.16	55.28	51.48**
S.D.	4.459	2.724	4.058	3.274
N	28	27	28	27
<u>MALE PUPS</u>				
MEAN	55.64	56.79	56.48	52.53**
S.D.	4.445	3.092	3.974	3.313
N	28	27	28	27
<u>FEMALE PUPS</u>				
MEAN	53.86	53.55	54.00	50.39**
S.D.	4.634	2.932	4.280	3.462
N	28	27	28	27
<u>LACTATIONAL DAY 28</u>				
<u>ENTIRE LITTER</u>				
MEAN	90.52	90.74	91.35	86.07**
S.D.	5.422	3.829	5.936	5.679
N	28	27	28	27
<u>MALE PUPS</u>				
MEAN	94.12	95.39	95.61	90.33
S.D.	5.754	4.205	5.672	7.496
N	28	27	28	27
<u>FEMALE PUPS</u>				
MEAN	86.85	86.09	86.89	81.69**
S.D.	5.438	4.421	6.563	4.798
N	28	27	28	27
<u>PUP BODY WEIGHTS CHANGES(g)</u>				
<u>LACTATIONAL DAY 1 TO 4</u>				
<u>ENTIRE LITTER</u>				
MEAN	3.17	3.32	3.23	3.15
S.D.	0.624	0.452	0.639	0.456
N	28	27	28	27
<u>MALE PUPS</u>				
MEAN	3.17	3.37	3.24	3.17
S.D.	0.655	0.490	0.665	0.481
N	28	27	28	27
<u>FEMALE PUPS</u>				
MEAN	3.16	3.27	3.22	3.11
S.D.	0.626	0.461	0.621	0.461
N	28	27	28	27
<u>LACTATIONAL DAY 4 TO 7</u>				
<u>ENTIRE LITTER</u>				
MEAN	6.18	6.43	6.52	6.28
S.D.	0.947	0.610	0.662	0.627
N	28	27	28	27
<u>MALE PUPS</u>				
MEAN	6.26	6.55	6.65	6.39
S.D.	0.958	0.621	0.708	0.629
N	28	27	28	27
<u>FEMALE PUPS</u>				
MEAN	6.14	6.29	6.38	6.19
S.D.	1.055	0.698	0.663	0.665
N	28	27	28	27
<u>LACTATIONAL DAY 7 TO 14</u>				
<u>ENTIRE LITTER</u>				
MEAN	17.89	17.88	17.79	17.00
S.D.	2.045	1.364	1.547	1.442
N	28	27	28	27

\*\* Significantly different from control group (p < .01)

Table 19 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DANLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP BODY WEIGHT AND WEIGHT CHANGE (GRAMS) PER LITTER

F1 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
MALE PUPS				
MEAN	18.15	18.30	18.01	17.29
S.D.	1.974	1.469	1.497	1.473
N	28	27	28	27
FEMALE PUPS				
MEAN	17.63	17.45	17.56	16.72
S.D.	2.135	1.351	1.642	1.442
N	28	27	28	27
<u>LACTATIONAL DAY 14 TO 21</u>				
ENTIRE LITTER				
MEAN	20.78	20.64	20.87	18.21**
S.D.	1.600	1.293	1.913	1.327
N	28	27	28	27
MALE PUPS				
MEAN	21.13	21.47	21.59	18.67**
S.D.	1.675	1.543	2.063	1.517
N	28	27	28	27
FEMALE PUPS				
MEAN	20.39	19.85	20.12	17.71**
S.D.	1.693	1.461	1.910	1.416
N	28	27	28	27
<u>LACTATIONAL DAY 21 TO 28</u>				
ENTIRE LITTER				
MEAN	35.76	35.58	36.07	34.58
S.D.	2.055	2.394	2.425	3.491
N	28	27	28	27
MALE PUPS				
MEAN	38.48	38.60	39.13	37.81
S.D.	2.331	2.646	2.574	5.658
N	28	27	28	27
FEMALE PUPS				
MEAN	32.98	32.55	32.88	31.30*
S.D.	2.055	2.270	2.701	2.104
N	28	27	28	27
* Significantly different from control group (p < .05)				
** Significantly different from control group (p < .01)				

Table 20  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP SURVIVAL INDICES

F1 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
LIVE BIRTH INDEX				
MEAN	97.6	96.7	99.1	99.1
S.D.	5.38	5.81	2.79	2.46
N	28	27	28	27
4-DAY SURVIVAL INDEX				
MEAN	97.9	98.5	97.8	98.9
S.D.	4.89	3.22	4.86	2.77
N	28	27	28	27
7-DAY SURVIVAL INDEX				
MEAN	100.0	100.0	100.0	100.0
S.D.	0.00	0.00	0.00	0.00
N	28	27	28	27
14-DAY SURVIVAL INDEX				
MEAN	100.0	100.0	100.0	100.0
S.D.	0.00	0.00	0.00	0.00
N	28	27	28	27
21-DAY SURVIVAL INDEX				
MEAN	99.1	100.0	100.0	100.0
S.D.	3.28	0.00	0.00	0.00
N	28	27	28	27
28-DAY SURVIVAL INDEX				
MEAN	99.6	100.0	100.0	100.0
S.D.	2.36	0.00	0.00	0.00
N	28	27	28	27
LACTATION INDEX <sup>a</sup>				
MEAN	99.1	100.0	100.0	100.0
S.D.	3.28	0.00	0.00	0.00
N	28	27	28	27

None significantly different from control group  
The equations used for calculating pup survival indices are recorded in the protocol.  
<sup>a</sup> Litters were weaned on lactational day 21.

TABLE 21  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	F1 ADULT MALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
NORMAL NO SIGNIFICANT CLINICAL OBSERVATIONS <sup>c</sup> (LOCATION NOT SPECIFIED) <sup>d</sup>	P	28(-21-118)	28(-21-118)	28(-21-118)	28(-21-118)
DEAD SACRIFICED MORIBUND (LOCATION NOT SPECIFIED)	P	0	0	0	1 ( 50)
SCHEDULED SACRIFICE (LOCATION NOT SPECIFIED)	P	28(117-118)	28(117-118)	28(117-118)	27(117-118)
BEHAVIOR/CNS HYPOACTIVE(LOCATION NOT SPECIFIED)	P	0	0	0	1 ( 50)
ATAXIA(LOCATION NOT SPECIFIED)	P	0	0	0	1 ( 50)
BODY EMACIATED(LOCATION NOT SPECIFIED)	P	0	0	0	1( 47- 50)
DEHYDRATED(LOCATION NOT SPECIFIED)	P	0	0	0	1( 47- 50)
SWELLING(NOSE)	P	0	1( 21- 25)	1( 23- 25)	3( 35-110)
UNKEMPT(LOCATION NOT SPECIFIED)	P	0	0	1( 89- 92)	1( 26- 32)
URINE STAINS(LOCATION NOT SPECIFIED)	P	0	0	0	3( 28- 56)
COLD EXTREMITIES(LEGS-ALL)	P	0	0	0	1 ( 50)
TRAUMATIZED(MOUTH)	P	0	1 ( 15)	0	2( 35- 48)
UROGENITAL AREA WETNESS (LOCATION NOT SPECIFIED)	P	0	0	0	1 ( 44)
EYES/EARS/NOSE REDDENED EYES		1	1	1	1
(EYE-LEFT)	P	0	1 ( 54)	0	1 ( 51)
(EYE-RIGHT)	P	1( 41- 62)	0	1( 44- 49)	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 21 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	F1 ADULT MALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
EYES/EARS/NOSE LACRIMATION <sup>c</sup>		0	1	1	1
(EYE-BOTH) <sup>d</sup>	P	0	0	0	1 ( 53)
(EYE-RIGHT)	P	0	1 ( 83)	1 ( 81)	1 ( 54)
OCULAR DISCHARGE		1	2	0	1
(EYE-BOTH)	P	0	1 ( -2)	0	0
(EYE-RIGHT)	P	1 ( 40)	2(-12-106)	0	1( 16- 17)
PERIOcular ENCRUSTATION		2	3	4	7
(EYE-BOTH)	P	0	2(-13-118)	2( 76- 83)	3( 26-117)
(EYE-LEFT)	P	1 (-15)	2( 15-118)	2( 72- 92)	1( 35- 50)
(EYE-RIGHT)	P	1( 23-118)	0	2( 23-117)	6(-15-117)
PERINASAL ENCRUSTATION (LOCATION NOT SPECIFIED)	P	2( 14-107)	3( 15-118)	3( 19- 98)	3( 26- 44)
EXCRETA LOOSE FECES(LOCATION NOT SPECIFIED)	P	0	1 ( 49)	0	5( 51-113)
ORAL/DENTAL OVERGROWN INCISORS (LOCATION NOT SPECIFIED)	P	1( 26- 51)	2( 20-109)	3( 48-109)	5( 22-109)
ORAL LESION(LOCATION NOT SPECIFIED)	P	0	1( 15- 19)	2( 26- 84)	1( 35- 50)
MALOCCLUSION(LOCATION NOT SPECIFIED)	P	1( 28- 41)	2( 15-118)	3( 23-117)	3( 35-117)
BROKEN INCISOR (LOCATION NOT SPECIFIED)	P	0	2( 15- 25)	1( 23- 25)	0
MISSING INCISOR (LOCATION NOT SPECIFIED)	P	0	0	1( 82-118)	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 21 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	F1 ADULT MALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
SKIN					
ALOPECIA <sup>c</sup>		1	1	0	2
(LEG-FRONT-BOTH) <sup>d</sup>	P	1( 26- 84)	1( 68-117)	0	2( 42-118)
(LEG-FORE-LEFT)	P	0	1( 82- 88)	0	1( 50- 51)
(LEG-FORE-RIGHT)	P	0	0	0	1(105-107)
EXCORIATED(EAR-RIGHT)	P	0	1( 91- 95)	0	0
CRUST(NOSE)	P	1(107-118)	0	0	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 22  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	F1 ADULT FEMALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
NORMAL NO SIGNIFICANT CLINICAL OBSERVATIONS <sup>c</sup> (LOCATION NOT SPECIFIED) <sup>d</sup>	P	28(-21-129)	28(-21-133)	28(-21-133)	28(-21-133)
DEAD FOUND DEAD(LOCATION NOT SPECIFIED)	P	1 ( -8)	1 ( -1)	0	0
SCHEDULED SACRIFICE (LOCATION NOT SPECIFIED)	P	27(113-129)	27(114-133)	28(113-133)	28(113-133)
BEHAVIOR/CNS PROSTRATION(LOCATION NOT SPECIFIED)	P	0	1 ( -1)	0	0
VOCALIZATION(LOCATION NOT SPECIFIED)	P	0	1 ( -1)	0	0
BODY DEHYDRATED(LOCATION NOT SPECIFIED)	P	0	1( -4- -1)	0	0
SWELLING		0	0	0	1
(LEGS-ALL)	P	0	0	0	1( 86-116)
(LEG-HIND-BOTH)	P	0	0	0	1( 70- 85)
ABDOMINAL DISTENSION (LOCATION NOT SPECIFIED)	P	0	1( -7- -1)	0	0
UNKEMPT(LOCATION NOT SPECIFIED)	P	0	0	0	1( 82- 97)
PALLOR(ENTIRE BODY)	P	0	1( -6- -1)	0	0
UROGENITAL DISCHARGE, RED (LOCATION NOT SPECIFIED)	P	1 ( 84)	1( 85- 87)	0	0
UROGENITAL AREA WETNESS (LOCATION NOT SPECIFIED)	P	0	1 ( -5)	0	0
ULCER(SIDE-RIGHT)	P	0	0	0	1(113-116)
CARDIO-PULMONARY GASPING(LOCATION NOT SPECIFIED)	P	0	1 ( -1)	0	0

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

TABLE 22 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	F1 ADULT FEMALES PPM				
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)	
EYES/EARS/NOSE						
REDDENED EYES(EYE-LEFT) <sup>c,d</sup>	P	0	0	0	1 ( 50- 51)	
LACRIMATION		0	0	1	3	
(EYE-LEFT)	P	0	0	1 ( 6- 62)	1 (-14)	
(EYE-RIGHT)	P	0	0	0	2 ( 51- 58)	
OCULAR DISCHARGE(EYE-RIGHT)	P	0	0	0	1 ( 56)	
SWOLLEN PERIOCCULAR TISSUE (EYE-RIGHT)	P	0	0	0	1 ( 56- 57)	
PERIOCCULAR ENCRUSTATION		0	1	4	4	
(EYE-BOTH)	P	0	0	1 ( 34-123)	2 ( 46-106)	
(EYE-LEFT)	P	0	0	4 ( 6- 93)	1 (-16- -9)	
(EYE-RIGHT)	P	0	1 ( 84- 85)	1 (124)	3 ( 44-116)	
PERINASAL ENCRUSTATION (LOCATION NOT SPECIFIED)	P	0	0	1 ( 34- 72)	2 ( 73- 89)	
PERINASAL DISCHARGE, RED (LOCATION NOT SPECIFIED)	P	0	0	0	1 ( 44)	
RED AND THICKENED EARS(EAR-RIGHT)	P	0	1 ( 99-118)	0	0	
EXCRETA						
LOOSE FECES(LOCATION NOT SPECIFIED)	P	0	0	0	1(111-112)	
ORAL/DENTAL						
OVERGROWN INCISORS (LOCATION NOT SPECIFIED)	P	0	0	3 ( 48- 75)	3 ( 48- 80)	
MALOCCLUSION(LOCATION NOT SPECIFIED)	P	0	1 ( 84- 85)	1 ( 86-116)	0	
BROKEN INCISOR (LOCATION NOT SPECIFIED)	P	0	0	2 ( 6- 88)	0	

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.



TABLE 22 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF CLINICAL OBSERVATIONS

CATEGORY FINDING (LOCATION)	GRADE <sup>a</sup>	F1 ADULT FEMALES PPM			
		0.0 (DAYS) <sup>b</sup>	300.0 (DAYS)	1000.0 (DAYS)	2000.0 (DAYS)
SKIN					
ALOPECIA <sup>c</sup>		3	2	2	1
(AXILLA-BOTH) <sup>d</sup>	P	1( 89- 99)	0	0	0
(HIP-BOTH)	P	0	1( 42- 43)	0	0
(LEGS-ALL)	P	0	1( 56-117)	0	0
(LEG-FRONT-BOTH)	P	2( 81-115)	1( 28-115)	2( 74-114)	0
(LEG-HIND-BOTH)	P	0	1( 76-105)	0	0
(MULTIPLE AREAS-NOS)	P	1( 91-114)	1( 44-111)	0	1( 56-116)

<sup>a</sup>Grades: P = present, 1 = mild, 2 = moderate, 3 = severe.

<sup>b</sup>Earliest to latest day a finding of the specified grade was observed.

<sup>c</sup>Number of animals exhibiting the finding at least once during the study.

<sup>d</sup>Number of animals exhibiting the finding at least once during the specified range of days.

Table 23  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT (GRAMS)

F1 ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0				
MEAN	281.6	289.8	281.5	272.6
S.D.	23.52	18.69	35.30	21.33
N	28	28	28	28
WEEK 1				
MEAN	328.5	337.7	339.8	318.0
S.D.	26.64	22.41	21.85	24.09
N	28	28	28	28
WEEK 2				
MEAN	367.3	377.8	378.8	352.3
S.D.	28.37	26.38	25.10	27.55
N	28	28	28	28
WEEK 3				
MEAN	397.8	409.2	414.7	384.9
S.D.	31.33	30.15	25.79	31.41
N	28	28	28	28
WEEK 4				
MEAN	423.0	436.9	443.8	405.9
S.D.	36.16	32.87	30.98	37.65
N	28	28	28	28
WEEK 5				
MEAN	444.0	459.0	467.8*	425.9
S.D.	38.46	35.06	32.15	38.92
N	28	28	28	28
WEEK 6				
MEAN	465.3	479.0	488.1	442.6
S.D.	38.82	38.04	35.21	46.78
N	28	28	28	28
WEEK 7				
MEAN	484.8	498.8	507.2	455.0
S.D.	42.47	41.04	38.80	59.12
N	28	28	28	28
WEEK 8				
MEAN	498.1	510.8	522.5	475.4
S.D.	43.18	45.49	40.86	44.77
N	28	28	28	27
WEEK 9				
MEAN	513.9	528.7	539.6	490.5
S.D.	45.73	48.78	43.99	43.93
N	28	28	28	27
WEEK 10				
MEAN	523.3	540.5	548.8	498.9
S.D.	48.05	50.98	44.32	46.48
N	28	28	28	27
WEEK 11				
MEAN	525.2	540.1	547.8	499.4
S.D.	45.61	51.72	46.17	47.80
N	28	28	28	27
WEEK 12				
MEAN	537.2	551.2	555.3	511.3
S.D.	46.88	53.37	51.48	48.47
N	28	28	28	27
WEEK 13				
MEAN	547.2	558.0	564.4	518.4
S.D.	49.16	56.33	55.56	48.48
N	28	28	28	27
WEEK 14				
MEAN	551.0	564.9	576.4	525.1
S.D.	52.88	55.73	54.43	47.89
N	28	28	28	27

\* Significantly different from control group (p < .05)

Table 23 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT (GRAMS)

F1 ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 15				
MEAN	557.2	576.5	590.9	532.0
S.D.	57.54	57.47	57.39	55.13
N	28	28	28	27
WEEK 16				
MEAN	569.9	588.1	600.8	536.7
S.D.	56.81	59.59	58.47	56.81
N	28	28	28	27
WEEK 17				
MEAN	577.1	596.3	609.8	545.1
S.D.	59.65	62.06	60.27	52.58
N	28	28	28	27
None significantly different from control group				

Table 24  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT GAIN (GRAMS)

F1 ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN	46.9	47.9	58.3	45.3
S.D.	5.15	6.16	39.04	5.80
N	28	28	28	28
WEEK 1 TO 2				
MEAN	38.8	40.0	39.1	34.4*
S.D.	5.44	6.30	7.16	5.14
N	28	28	28	28
WEEK 2 TO 3				
MEAN	30.5	31.5	35.9*	32.5
S.D.	5.72	9.08	8.02	6.44
N	28	28	28	28
WEEK 3 TO 4				
MEAN	25.2	27.7	29.1	21.0
S.D.	8.69	5.46	9.01	15.54
N	28	28	28	28
WEEK 4 TO 5				
MEAN	21.0	22.1	24.0	20.0
S.D.	6.15	6.26	4.46	6.39
N	28	28	28	28
WEEK 5 TO 6				
MEAN	21.3	19.9	20.4	16.7
S.D.	3.49	4.91	6.46	16.52
N	28	28	28	28
WEEK 6 TO 7				
MEAN	19.5	19.8	19.0	12.5
S.D.	5.64	5.18	8.86	23.32
N	28	28	28	28
WEEK 7 TO 8				
MEAN	13.3	12.0	15.3	12.9
S.D.	5.66	6.26	5.09	4.99
N	28	28	28	27
WEEK 8 TO 9				
MEAN	15.7	17.8	17.1	15.1
S.D.	5.96	7.19	6.10	5.89
N	28	28	28	27
WEEK 9 TO 10				
MEAN	9.4	11.8	9.2	8.4
S.D.	4.25	5.66	4.66	6.03
N	28	28	28	27
WEEK 10 TO 11				
MEAN	2.0	-0.4	-1.0	0.5
S.D.	9.48	7.14	6.84	6.16
N	28	28	28	27
WEEK 11 TO 12				
MEAN	11.9	11.1	7.5	11.9
S.D.	8.37	7.38	9.01	5.51
N	28	28	28	27
WEEK 12 TO 13				
MEAN	10.0	6.8	9.1	7.1
S.D.	6.22	8.70	9.02	6.20
N	28	28	28	27
WEEK 13 TO 14				
MEAN	3.8	7.0	12.0**	6.7
S.D.	6.32	8.05	6.71	7.58
N	28	28	28	27
WEEK 14 TO 15				
MEAN	6.2	11.6	14.5	6.9
S.D.	20.28	8.28	7.29	14.26
N	28	28	28	27

\* Significantly different from control group (p < .05)

\*\* Significantly different from control group (p < .01)

Table 24 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT GAIN (GRAMS)

F1 ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 15 TO 16				
MEAN	12.7	11.6	9.9	4.8
S.D.	20.85	5.77	6.15	8.14
N	28	28	28	27
WEEK 16 TO 17				
MEAN	7.2	8.2	9.0	8.3
S.D.	6.10	6.54	5.77	8.80
N	28	28	28	27
None significantly different from control group				

Table 25  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT (GRAMS)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0				
MEAN	189.9	191.3	196.8	187.9
S.D.	10.44	17.92	15.15	11.52
N	27	27	28	28
WEEK 1				
MEAN	208.1	210.1	217.4	205.5
S.D.	10.58	20.09	18.68	13.33
N	27	27	28	28
WEEK 2				
MEAN	225.3	229.2	235.5	220.6
S.D.	10.86	21.83	22.00	13.79
N	27	27	28	28
WEEK 3				
MEAN	235.5	241.0	247.8*	231.1
S.D.	11.70	25.98	21.69	13.83
N	27	27	28	28
WEEK 4				
MEAN	243.8	252.8	259.1*	243.1
S.D.	12.34	26.52	24.80	15.96
N	27	27	28	28
WEEK 5				
MEAN	249.4	258.1	263.3*	246.0
S.D.	13.12	27.32	26.02	16.41
N	27	27	28	28
WEEK 6				
MEAN	256.2	265.5	272.7*	255.8
S.D.	13.42	28.62	26.99	17.63
N	27	27	28	28
WEEK 7				
MEAN	261.6	273.4	279.9*	261.2
S.D.	15.45	29.55	28.04	17.34
N	27	27	28	28
WEEK 8				
MEAN	263.9	278.3	285.3**	265.2
S.D.	14.70	28.81	27.56	17.60
N	27	27	28	28
WEEK 9				
MEAN	270.7	284.4	291.8**	270.9
S.D.	16.75	29.72	31.07	19.22
N	27	27	28	28
WEEK 10				
MEAN	273.3	286.5	293.8**	271.7
S.D.	15.52	29.50	31.03	19.35
N	27	27	28	28
* Significantly different from control group (p < .05)				
** Significantly different from control group (p < .01)				

Table 26  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF BODY WEIGHT GAIN (GRAMS)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN	18.2	18.7	20.6	17.7
S.D.	4.45	6.37	6.94	4.55
N	27	27	28	28
WEEK 1 TO 2				
MEAN	17.2	19.1	18.1	15.1
S.D.	4.27	5.82	8.32	4.52
N	27	27	28	28
WEEK 2 TO 3				
MEAN	10.2	11.8	12.4	10.5
S.D.	4.77	7.57	6.11	6.10
N	27	27	28	28
WEEK 3 TO 4				
MEAN	8.3	11.8*	11.2	12.0*
S.D.	4.36	5.44	6.22	4.16
N	27	27	28	28
WEEK 4 TO 5				
MEAN	5.6	5.3	4.2	3.0
S.D.	5.70	4.98	6.29	5.72
N	27	27	28	28
WEEK 5 TO 6				
MEAN	6.8	7.4	9.4	9.8
S.D.	5.73	5.56	6.15	6.86
N	27	27	28	28
WEEK 6 TO 7				
MEAN	5.4	7.9	7.2	5.3
S.D.	6.79	5.01	7.20	6.77
N	27	27	28	28
WEEK 7 TO 8				
MEAN	2.2	4.9	5.4	4.1
S.D.	6.32	7.42	5.50	7.39
N	27	27	28	28
WEEK 8 TO 9				
MEAN	6.8	6.1	6.6	5.7
S.D.	7.72	6.49	7.88	6.25
N	27	27	28	28
WEEK 9 TO 10				
MEAN	2.6	2.1	2.0	0.8
S.D.	6.28	5.21	5.46	5.78
N	27	27	28	28

\* Significantly different from control group (p < .05)

FIGURE 4  
TWO-GENERATION REPRODUCTION STUDY OF ADBAC  
ADMINISTERED IN THE DIET TO CD (SPRAGUE-DAWLEY) RATS  
MEAN BODY WEIGHTS VERSUS TIME  
F1 ADULT MALES

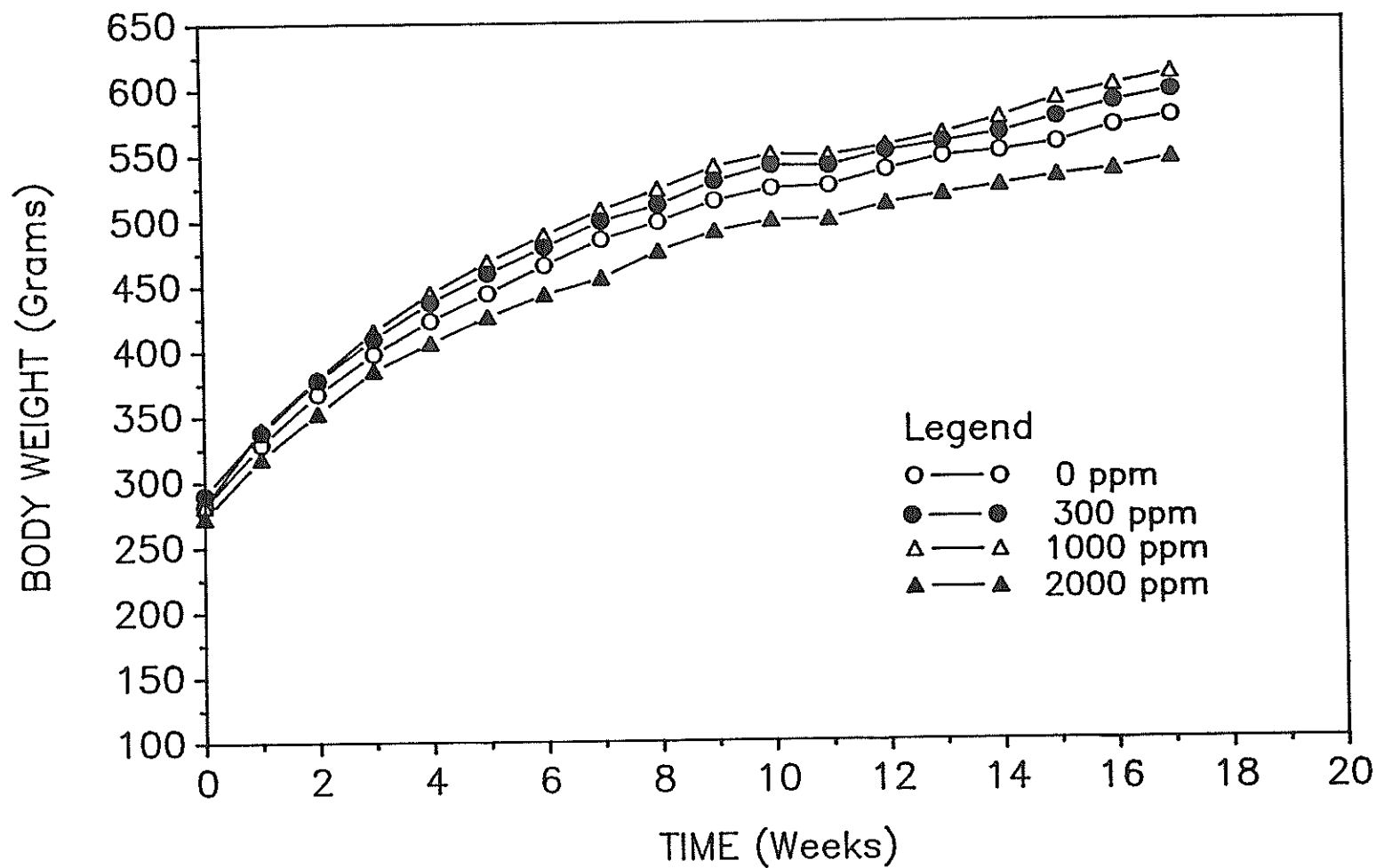




FIGURE 5  
TWO-GENERATION REPRODUCTION STUDY OF ADBAC ADMINISTERED  
IN THE DIET TO CD (SPRAGUE-DAWLEY) RATS  
MEAN BODY WEIGHTS VERSUS TIME  
F1 ADULT FEMALES

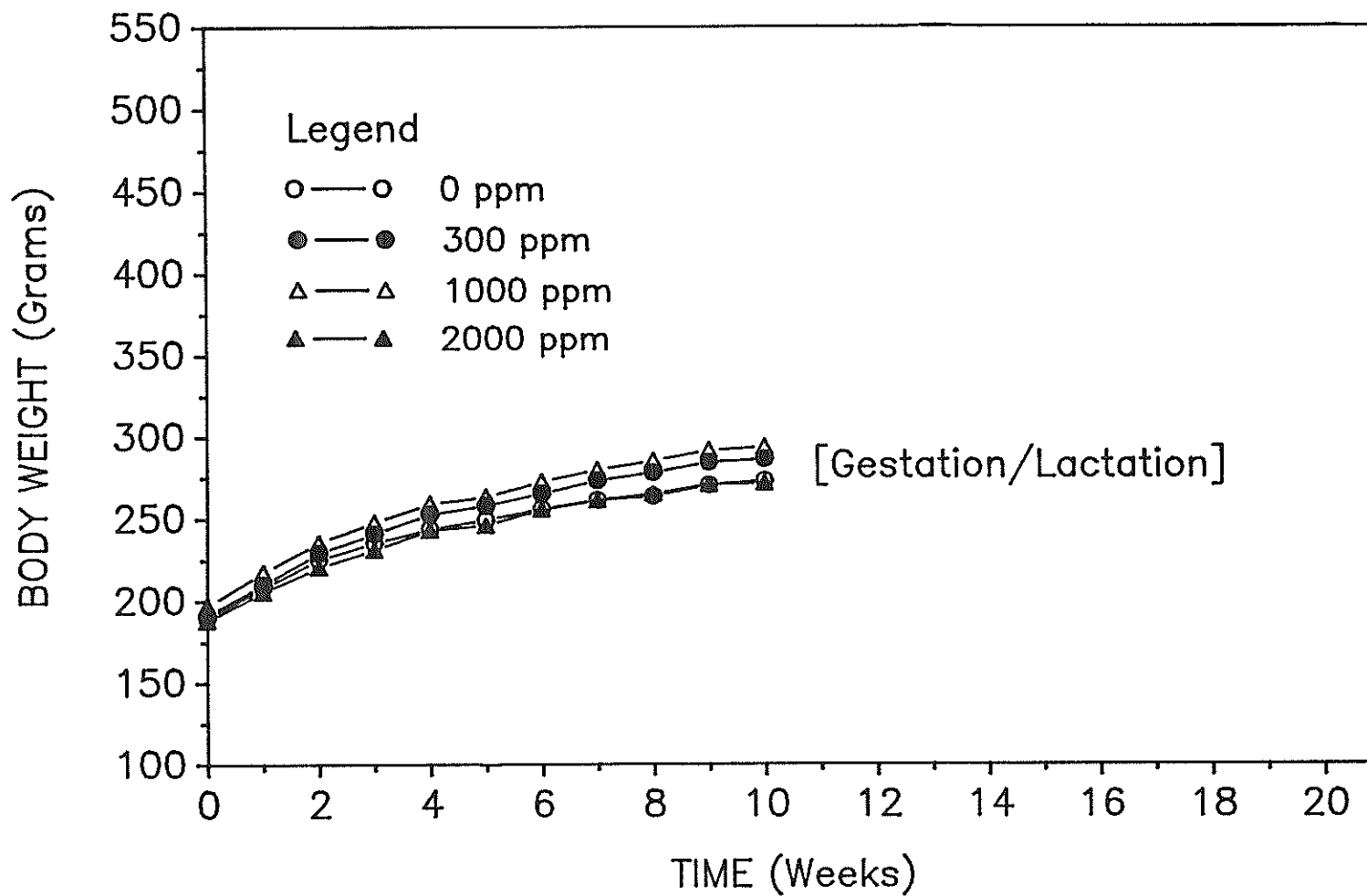


Table 27  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 0				
MEAN	24.7	25.9	25.3	24.0
S.D.	2.40	1.80	2.03	2.17
N	28	28	28	28
WEEK 0 TO 1				
MEAN	26.1	27.2	27.1	25.4
S.D.	2.35	2.09	2.14	2.37
N	28	28	28	28
WEEK 1 TO 2				
MEAN	28.3	29.6	29.0	27.3
S.D.	2.32	2.25	2.37	2.62
N	28	28	28	28
WEEK 2 TO 3				
MEAN	27.9	28.9	29.0	27.1
S.D.	2.12	2.05	2.25	2.63
N	27	26	25	28
WEEK 3 TO 4				
MEAN	28.9	30.0	29.6	27.0*
S.D.	3.01	2.33	2.80	3.24
N	28	28	28	28
WEEK 4 TO 5				
MEAN	28.2	29.9	29.3	26.9
S.D.	2.74	2.60	2.51	3.29
N	28	28	28	28
WEEK 5 TO 6				
MEAN	28.8	30.1	29.8	27.3
S.D.	2.67	2.57	2.66	3.50
N	28	28	28	28
WEEK 6 TO 7				
MEAN	28.5	29.5	28.9	26.1*
S.D.	2.62	2.66	2.72	5.47
N	28	28	28	28
WEEK 7 TO 8				
MEAN	27.9	28.6	28.8	26.6
S.D.	2.33	2.82	3.04	2.93
N	28	28	28	27
WEEK 8 TO 9				
MEAN	27.6	28.6	28.5	26.6
S.D.	2.35	2.78	2.91	2.10
N	28	28	28	27
WEEK 9 TO 10				
MEAN	28.1	29.4	28.9	26.9
S.D.	2.35	2.37	2.57	2.64
N	28	28	28	27
WEEK 13 TO 14				
MEAN	28.4	29.3	30.7*	28.1
S.D.	3.02	2.98	3.14	2.77
N	28	27	28	27
WEEK 14 TO 15				
MEAN	28.0	28.9	29.0	26.8
S.D.	2.55	3.19	3.53	3.90
N	28	27	28	27
WEEK 15 TO 16				
MEAN	28.8	30.3	30.3	26.7*
S.D.	2.88	3.06	2.97	3.12
N	28	27	28	27

\* Significantly different from control group (p < .05)

TABLE 28  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF TEST MATERIAL CONSUMPTION (MG/KG/DAY)

F1 ADULT MALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN		26.1	87.4	172.4
S.D.		1.39	7.14	10.16
N		28	28	28
WEEK 1 TO 2				
MEAN		24.9	80.8	163.1
S.D.		1.49	4.12	9.95
N		28	28	28
WEEK 2 TO 3				
MEAN		22.2	73.2	147.0
S.D.		1.39	4.48	7.50
N		26	25	28
WEEK 3 TO 4				
MEAN		21.3	69.0	136.4
S.D.		1.23	4.37	11.19
N		28	28	28
WEEK 4 TO 5				
MEAN		20.0	64.3	129.3
S.D.		1.38	3.50	9.20
N		28	28	28
WEEK 5 TO 6				
MEAN		19.3	62.3	125.9
S.D.		1.12	3.50	10.77
N		28	28	28
WEEK 6 TO 7				
MEAN		18.1	58.2	115.4
S.D.		0.85	3.25	20.12
N		28	28	28
WEEK 7 TO 8				
MEAN		17.0	55.9	113.4
S.D.		0.89	3.35	7.39
N		28	28	27
WEEK 8 TO 9				
MEAN		16.5	53.6	110.5
S.D.		0.91	3.33	7.88
N		28	28	27
WEEK 9 TO 10				
MEAN		16.5	53.2	108.8
S.D.		0.82	3.02	6.68
N		28	28	27
WEEK 13 TO 14				
MEAN		15.7	53.9	107.7
S.D.		1.29	4.23	6.68
N		27	28	27
WEEK 14 TO 15				
MEAN		15.2	49.7	101.0
S.D.		1.23	4.36	9.41
N		27	28	27
WEEK 15 TO 16				
MEAN		15.6	51.0	100.0
S.D.		0.93	3.54	5.82
N		27	28	27
GRAND MEAN				
MEAN		19.1	62.5	125.4
S.D.		3.59	11.93	23.33
N		13	13	13

Table 29  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK * TO 0				
MEAN	18.2	18.6	18.8	17.7
S.D.	1.05	1.68	1.63	1.35
N	27	27	28	28
WEEK 0 TO 1				
MEAN	18.4	19.0	19.3	17.9
S.D.	1.04	1.93	2.43	1.79
N	27	27	28	28
WEEK 1 TO 2				
MEAN	20.4	21.7	21.1	19.6
S.D.	1.25	2.50	2.51	1.78
N	26	25	28	28
WEEK 2 TO 3				
MEAN	20.2	21.6*	20.8	19.2
S.D.	1.39	2.28	1.84	1.81
N	26	22	25	26
WEEK 3 TO 4				
MEAN	19.8	20.9	20.6	19.3
S.D.	1.25	2.18	2.53	1.76
N	26	23	27	26
WEEK 4 TO 5				
MEAN	19.7	20.6	20.1	19.1
S.D.	1.27	2.11	2.55	1.78
N	27	24	27	27
WEEK 5 TO 6				
MEAN	19.9	21.4*	20.8	19.5
S.D.	1.73	2.54	2.22	2.13
N	26	26	27	28
WEEK 6 TO 7				
MEAN	19.6	21.0*	19.8	18.9
S.D.	1.80	1.88	1.79	2.13
N	24	23	26	27
WEEK 7 TO 8				
MEAN	19.0	20.1	19.3	18.2
S.D.	1.79	1.56	2.17	1.55
N	26	26	27	27
WEEK 8 TO 9				
MEAN	18.7	20.3**	20.3**	18.3
S.D.	1.38	1.85	2.06	1.80
N	24	23	26	27
WEEK 9 TO 10				
MEAN	19.0	20.6*	20.2	18.8
S.D.	1.60	1.79	2.15	2.03
N	25	25	28	28

\* Significantly different from control group (p < .05)

\*\* Significantly different from control group (p < .01)

TABLE 30  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF TEST MATERIAL CONSUMPTION (MG/KG/DAY)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
WEEK 0 TO 1				
MEAN		28.5	92.9	182.3
S.D.		2.33	7.43	14.28
N		27	28	28
WEEK 1 TO 2				
MEAN		29.7	93.2	183.7
S.D.		2.84	7.02	13.66
N		25	28	28
WEEK 2 TO 3				
MEAN		27.3	85.1	170.8
S.D.		1.79	3.82	14.59
N		22	25	26
WEEK 3 TO 4				
MEAN		25.3	80.9	162.3
S.D.		1.94	4.86	10.18
N		23	27	26
WEEK 4 TO 5				
MEAN		24.1	76.6	156.4
S.D.		2.01	5.12	11.36
N		24	27	27
WEEK 5 TO 6				
MEAN		24.5	77.5	155.0
S.D.		1.99	5.57	12.63
N		26	27	28
WEEK 6 TO 7				
MEAN		23.3	71.7	145.9
S.D.		1.85	4.38	14.72
N		23	26	27
WEEK 7 TO 8				
MEAN		21.9	68.5	139.3
S.D.		1.92	4.69	12.11
N		26	27	27
WEEK 8 TO 9				
MEAN		21.8	69.7	137.2
S.D.		1.89	4.76	11.95
N		23	26	27
WEEK 9 TO 10				
MEAN		21.8	69.1	138.6
S.D.		2.34	6.05	12.22
N		25	28	28
GRAND MEAN				
MEAN		24.8	78.5	157.1
S.D.		2.86	9.37	17.46
N		10	10	10

Table 31

Reproductive Parameters for F1 Parents at F2 Breed

	Alkyl Dimethyl Benzyl Ammonium Chloride (ppm, in diet)			
	0	300	1000	2000
No. F1 pairs at study start	27 females <sup>a</sup> 28 males	27 females <sup>a</sup> 28 males	28	28
No. F1 pairs at start of F2 breed	27 females 28 males	27 females 28 males	28	28 females 27 males <sup>b</sup>
No. plug-/sperm-positive females	27 <sup>c</sup>	25 <sup>c</sup>	27	26
No. pregnant	25	24	23	25
No. live litters on postnatal day 0	25	24	23	25
Gestational length (days) <sup>d</sup>	21.9 ± 0.4	22.0 ± 0.4	22.1 ± 0.5	21.9 ± 0.4
<u>INDICES<sup>b</sup></u>				
Mating Index				
(males)	92.9	85.7	96.4	96.3
(females)	100.0	92.6	96.4	92.9
Fertility Index				
(males)	92.3	100.0	85.2	96.2
(females)	92.6	96.0	85.2	96.2
Gestational Index	100.0	100.0	100.0	100.0

<sup>a</sup> One female each at 0.0 and 300.0 ppm died prior to pre-breed treatment; males paired by randomization to decreased females were utilized when possible at mating switches.

<sup>b</sup> One mate died during pre-breed treatment due to trauma; the extra female was assigned to a live unsuccessful male during mating switches.

<sup>c</sup> The values are presented as mean ± 1 standard deviation.

<sup>d</sup> The indices are defined in the text.

Table 32  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DINETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF GESTATIONAL BODY WEIGHT AND WEIGHT CHANGE (GRAMS)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>GESTATIONAL BODY WEIGHTS (g)</u>				
DAY 0				
MEAN	273.30	282.17	298.24**	271.05
S.D.	16.088	20.781	29.921	21.890
N	24 <sup>a</sup>	23 <sup>a</sup>	23	25
DAY 6				
MEAN	298.38	307.20	323.03**	297.21
S.D.	16.372	22.169	28.651	24.230
N	24	23	23	25
DAY 15				
MEAN	332.31	338.11	357.65**	331.58
S.D.	18.090	26.539	32.171	27.091
N	24	23	23	25
DAY 20				
MEAN	392.17	394.34	417.47*	392.13
S.D.	26.645	36.523	38.897	29.309
N	24	23	23	25
<u>GESTATIONAL BODY WEIGHT CHANGES (g)</u>				
DAY 0 TO 6				
MEAN	25.08	25.03	24.78	26.17
S.D.	6.135	6.049	6.662	6.799
N	24	23	23	25
DAY 6 TO 15				
MEAN	33.93	30.91	34.62	34.36
S.D.	6.900	8.534	6.575	5.466
N	24	23	23	25
DAY 15 TO 20				
MEAN	59.86	56.23	59.82	60.55
S.D.	13.495	12.788	12.067	9.137
N	24	23	23	25
DAY 0 TO 20 (GESTATION)				
MEAN	118.87	112.17	119.22	121.08
S.D.	19.716	21.275	16.590	15.026
N	24	23	23	25
* Significantly different from control group (p < .05)				
** Significantly different from control group (p < .01)				
<sup>a</sup> The plug was missed for one pregnant female, data not included.				

Table 33  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF GESTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
DAY 0 TO 4				
MEAN	22.72	23.43	23.34	21.38
S.D.	2.428	1.807	2.085	1.992
N	24	22	23	24
DAY 4 TO 7				
MEAN	23.34	24.42	24.66	22.77
S.D.	2.452	1.709	2.820	2.604
N	24	23	23	25
DAY 7 TO 11				
MEAN	25.17	24.98	26.05	23.14*
S.D.	2.173	2.298	2.539	2.726
N	24	22	23	25
DAY 11 TO 14				
MEAN	23.92	24.66	25.43	23.40
S.D.	2.026	2.661	2.673	2.966
N	24	23	23	25
DAY 14 TO 17				
MEAN	25.44	24.62	25.68	23.70*
S.D.	2.532	2.259	2.549	2.029
N	24	23	23	25
DAY 17 TO 20				
MEAN	26.45	26.22	26.39	25.29
S.D.	2.371	2.625	2.466	3.089
N	24	23	23	25
DAY 0 TO 7				
MEAN	22.98	23.83	23.91	21.87
S.D.	2.313	1.627	2.311	1.990
N	24	22	23	24
DAY 7 TO 14				
MEAN	24.64	24.83	25.78	23.25
S.D.	2.012	2.170	2.439	2.589
N	24	22	23	25
DAY 14 TO 20				
MEAN	25.95	25.42	26.03	24.50
S.D.	2.309	2.369	2.195	2.189
N	24	23	23	25
* Significantly different from control group (p < .05)				
The N is reduced due to food spillage.				



Table 34  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LACTATIONAL BODY WEIGHT AND WEIGHT CHANGE (GRAMS)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>LACTATIONAL BODY WEIGHTS (g)</u>				
DAY 0				
MEAN	301.58	307.08	320.83*	299.54
S.D.	19.129	27.738	29.730	26.400
N	25	24	23	25
DAY 7				
MEAN	314.72	315.74	336.99**	316.80
S.D.	15.498	23.763	23.044	22.089
N	25	24	23	25
DAY 14				
MEAN	328.77	327.07	353.86**	330.62
S.D.	15.456	20.825	27.523	24.635
N	25	24	23	25
DAY 21				
MEAN	333.66	329.62	350.99	342.73
S.D.	16.220	23.220	30.286	24.805
N	25	24	23	25
<u>LACTATIONAL BODY WEIGHT CHANGES (g)</u>				
DAY 0 TO 7				
MEAN	13.15	8.65	16.16	17.25
S.D.	13.248	11.173	20.603	11.418
N	25	24	23	25
DAY 7 TO 14				
MEAN	14.05	11.34	16.87	13.82
S.D.	11.146	13.112	10.504	11.702
N	25	24	23	25
DAY 14 TO 21				
MEAN	4.89	2.55	-2.87	12.11
S.D.	11.430	13.531	14.580	16.265
N	25	24	23	25
DAY 0 TO 21 (LACTATION)				
MEAN	32.09	22.54	30.16	43.19
S.D.	14.226	15.457	25.405	17.756
N	25	24	23	25
* Significantly different from control group (p < .05)				
** Significantly different from control group (p < .01)				

Table 35  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES				
GROUP: PPM	0.0	300.0	1000.0	2000.0
DAY 0 TO 4				
MEAN	26.92	24.92	28.73	27.99
S.D.	6.485	5.458	6.407	5.062
N	25	24	23	25
DAY 4 TO 7				
MEAN	38.46	36.55	40.81	38.68
S.D.	5.995	5.881	7.451	4.187
N	25	24	23	25
DAY 7 TO 10				
MEAN	47.01	42.55	47.70	44.09
S.D.	4.352	8.131	7.989	5.801
N	25	24	23	25
DAY 10 TO 14				
MEAN	52.78	51.56	54.44	49.40
S.D.	8.268	9.347	7.821	8.968
N	24	24	21	25
DAY 0 TO 7				
MEAN	31.87	29.90	33.91	32.57
S.D.	5.858	5.304	6.213	4.185
N	25	24	23	25
DAY 7 TO 14				
MEAN	50.23	47.70	51.11	47.13
S.D.	5.977	8.429	7.077	6.487
N	24	24	21	25
None significantly different from control group				
Data not included for animals with observed food spillage				

Table 36  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LITTER VIABILITY

		F2 PUPS			
GROUP: PPM	0.0	300.0	1000.0	2000.0	
<u>LACTATIONAL DAY 0</u>					
TOTAL BORN	331	302	307	345	
TOTAL BORN ALIVE	327	295	305	336	
NO. STILLBORN	4	7	2	9	
<u>LACTATIONAL DAY 4 (PRECULL)</u>					
NO. ALIVE	321	285	301	324	
NO. DEAD (DAYS 0 TO 4 PRECULL)	6	10	4	12	
<u>LACTATIONAL DAY 4 (POSTCULL)</u>					
NO. ALIVE	190	174	179	198	
<u>LACTATIONAL DAY 7</u>					
NO. ALIVE	190	173	179	198	
NO. DEAD (DAYS 4 POSTCULL TO 7)	0	1	0	0	
<u>LACTATIONAL DAY 14</u>					
NO. ALIVE	190	173	179	198	
NO. DEAD (DAYS 7 TO 14)	0	0	0	0	
NO. DEAD (DAYS 4 POSTCULL TO 14)	0	1	0	0	
<u>LACTATIONAL DAY 21</u>					
NO. ALIVE	189	173	179	197	
NO. DEAD (DAYS 14 TO 21)	1	0	0	1	
NO. DEAD (DAYS 4 POSTCULL TO 21)	1	1	0	1	
<u>LACTATIONAL DAY 28<sup>a</sup></u>					
NO. ALIVE	189	173	179	197	
NO. DEAD (DAYS 21 TO 28)	0	0	0	0	
NO. DEAD (DAYS 4 POSTCULL TO 28)	1	1	0	1	

None significantly different from control group  
<sup>a</sup> Litters were weaned on lactational day 21.

Table 37  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LITTER SIZE AND SEX RATIO

F2 PUPS					
GROUP: PPM	0.0	300.0	1000.0	2000.0	
<u>LACTATIONAL DAY 0</u>					
TOTAL BORN/LITTER					
MEAN	13.2	12.6	13.3	13.8	
S.D.	3.69	4.11	3.32	2.50	
N	25	24	23	25	
TOTAL BORN ALIVE/LITTER					
MEAN	13.1	12.3	13.3	13.4	
S.D.	3.76	4.01	3.25	2.45	
N	25	24	23	25	
SEX RATIO					
MEAN	50.7	46.7	47.9	51.8	
S.D.	17.37	20.24	11.68	16.47	
N	25	24	23	25	
<u>LACTATIONAL DAY 4 (PRECULL)</u>					
LITTER SIZE					
MEAN	12.8	11.9	13.1	13.0	
S.D.	4.13	4.17	3.20	2.15	
N	25	24	23	25	
SEX RATIO					
MEAN	50.4	46.5	47.9	51.7	
S.D.	17.67	20.46	11.66	16.63	
N	25	24	23	25	
<u>LACTATIONAL DAY 4 (POSTCULL)</u>					
LITTER SIZE					
MEAN	7.6	7.3	7.8	7.9	
S.D.	1.32	1.92	0.67	0.40	
N	25	24	23	25	
SEX RATIO					
MEAN	52.2	48.9	47.5	52.7	
S.D.	12.81	15.52	7.57	7.50	
N	25	24	23	25	
<u>LACTATIONAL DAY 7</u>					
LITTER SIZE					
MEAN	7.6	7.2	7.8	7.9	
S.D.	1.32	1.91	0.67	0.40	
N	25	24	23	25	
SEX RATIO					
MEAN	52.2	49.2	47.5	52.7	
S.D.	12.81	15.61	7.57	7.50	
N	25	24	23	25	
<u>LACTATIONAL DAY 14</u>					
LITTER SIZE					
MEAN	7.6	7.2	7.8	7.9	
S.D.	1.32	1.91	0.67	0.40	
N	25	24	23	25	
SEX RATIO					
MEAN	52.2	49.2	47.5	52.7	
S.D.	12.81	15.61	7.57	7.50	
N	25	24	23	25	
<u>LACTATIONAL DAY 21</u>					
LITTER SIZE					
MEAN	7.6	7.2	7.8	7.9	
S.D.	1.33	1.91	0.67	0.44	
N	25	24	23	25	
SEX RATIO					
MEAN	51.9	49.2	47.5	53.0	
S.D.	12.94	15.61	7.57	7.53	
N	25	24	23	25	
None significantly different from control group					

Table 37 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF LITTER SIZE AND SEX RATIO

F2 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>LACTATIONAL DAY 28<sup>a</sup></u>				
LITTER SIZE				
MEAN	7.6	7.2	7.8	7.9
S.D.	1.33	1.91	0.67	0.44
N	25	24	23	25
SEX RATIO				
MEAN	51.9	49.2	47.5	53.0
S.D.	12.94	15.61	7.57	7.53
N	25	24	23	25

None significantly different from control group

<sup>a</sup> Litters were weaned on lactational day 21.

Table 38  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP BODY WEIGHT AND WEIGHT CHANGE (GRAMS) PER LITTER

F2 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>PUP BODY WEIGHTS (g)</u>				
<u>LACTATIONAL DAY 1</u>				
ENTIRE LITTER				
MEAN	6.65	6.78	6.93	6.70
S.D.	0.774	0.903	0.763	0.739
N	25	24	23	25
MALE PUPS				
MEAN	6.81	6.87	7.20	6.89
S.D.	0.782	0.747	0.902	0.742
N	25	23	23	25
FEMALE PUPS				
MEAN	6.41	6.55	6.71	6.50
S.D.	0.656	0.883	0.735	0.720
N	24	23	23	25
<u>LACTATIONAL DAY 4 (PRE CULL)</u>				
ENTIRE LITTER				
MEAN	9.71	9.84	10.15	9.90
S.D.	1.408	1.596	1.344	1.327
N	25	24	23	25
MALE PUPS				
MEAN	9.89	10.01	10.46	10.10
S.D.	1.451	1.555	1.476	1.342
N	25	23	23	25
FEMALE PUPS				
MEAN	9.43	9.50	9.90	9.66
S.D.	1.316	1.468	1.310	1.267
N	24	23	23	25
<u>LACTATIONAL DAY 4 (POST CULL)</u>				
ENTIRE LITTER				
MEAN	9.75	9.91	10.23	9.97
S.D.	1.380	1.589	1.293	1.304
N	25	24	23	25
MALE PUPS				
MEAN	9.92	10.05	10.51	10.16
S.D.	1.437	1.587	1.452	1.320
N	25	23	23	25
FEMALE PUPS				
MEAN	9.46	9.57	10.00	9.74
S.D.	1.249	1.428	1.278	1.251
N	24	23	23	25
<u>LACTATIONAL DAY 7</u>				
ENTIRE LITTER				
MEAN	15.73	15.59	16.22	15.80
S.D.	1.581	2.081	1.563	1.781
N	25	24	23	25
MALE PUPS				
MEAN	15.93	16.01	16.61	16.08
S.D.	1.782	1.892	1.735	1.809
N	25	23	23	25
FEMALE PUPS				
MEAN	15.49	15.18	15.89	15.46
S.D.	1.473	1.984	1.545	1.732
N	24	23	23	25
<u>LACTATIONAL DAY 14</u>				
ENTIRE LITTER				
MEAN	30.27	29.39	30.91	29.95
S.D.	2.675	4.024	2.712	4.176
N	25	24	23	25
MALE PUPS				
MEAN	30.62	30.48	31.53	30.46
S.D.	3.007	3.167	2.806	4.259
N	25	23	23	25

None significantly different from control group

Table 38 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP BODY WEIGHT AND WEIGHT CHANGE (GRAMS) PER LITTER

F2 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
<u>FEMALE PUPS</u>				
MEAN	30.09	28.65	30.34	29.38
S.D.	2.285	3.760	2.768	4.077
N	24	23	23	25
<u>LACTATIONAL DAY 21</u>				
<u>ENTIRE LITTER</u>				
MEAN	47.79	46.66	48.75	45.38
S.D.	3.943	5.201	4.716	5.972
N	25	24	23	25
<u>MALE PUPS</u>				
MEAN	48.18	47.98	49.81	46.21
S.D.	4.500	3.916	5.096	6.170
N	25	23	23	25
<u>FEMALE PUPS</u>				
MEAN	47.63	45.91	47.76	44.42
S.D.	3.607	5.081	4.591	5.723
N	24	23	23	25
<u>LACTATIONAL DAY 28</u>				
<u>ENTIRE LITTER</u>				
MEAN	82.21	80.20	82.39	74.46**
S.D.	5.929	7.638	6.449	8.780
N	25	24	23	25
<u>MALE PUPS</u>				
MEAN	84.76	83.75	85.93	77.22**
S.D.	7.151	6.661	7.259	9.215
N	25	23	23	25
<u>FEMALE PUPS</u>				
MEAN	79.81	77.31	79.32	71.07**
S.D.	5.321	7.061	6.253	8.347
N	24	23	23	25
<u>PUP BODY WEIGHTS CHANGES(g)</u>				
<u>LACTATIONAL DAY 1 TO 4</u>				
<u>ENTIRE LITTER</u>				
MEAN	3.07	3.06	3.22	3.19
S.D.	0.712	0.971	0.679	0.677
N	25	24	23	25
<u>MALE PUPS</u>				
MEAN	3.08	3.14	3.26	3.22
S.D.	0.733	0.899	0.702	0.692
N	25	23	23	25
<u>FEMALE PUPS</u>				
MEAN	3.02	2.95	3.19	3.16
S.D.	0.719	0.912	0.679	0.648
N	24	23	23	25
<u>LACTATIONAL DAY 4 TO 7</u>				
<u>ENTIRE LITTER</u>				
MEAN	6.02	5.75	6.07	5.90
S.D.	0.751	1.239	0.763	0.688
N	25	24	23	25
<u>MALE PUPS</u>				
MEAN	6.04	6.00	6.15	5.98
S.D.	0.884	0.833	0.787	0.713
N	25	23	23	25
<u>FEMALE PUPS</u>				
MEAN	6.05	5.68	5.99	5.80
S.D.	0.605	1.227	0.805	0.683
N	24	23	23	25
<u>LACTATIONAL DAY 7 TO 14</u>				
<u>ENTIRE LITTER</u>				
MEAN	14.54	13.80	14.69	14.15
S.D.	2.225	2.708	1.973	2.791
N	25	24	23	25

\*\* Significantly different from control group (p < .01)

Table 38 (continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP BODY WEIGHT AND WEIGHT CHANGE (GRAMS) PER LITTER

		F2 PUPS			
GROUP: PPM	0.0	300.0	1000.0	2000.0	
MALE PUPS					
MEAN	14.69	14.47	14.92	14.38	
S.D.	2.471	2.239	2.037	2.867	
N	25	23	23	25	
FEMALE PUPS					
MEAN	14.60	13.47	14.45	13.91	
S.D.	1.681	2.545	1.970	2.737	
N	24	23	23	25	
<u>LACTATIONAL DAY 14 TO 21</u>					
ENTIRE LITTER					
MEAN	17.52	17.27	17.83	15.43**	
S.D.	2.200	2.056	2.800	2.630	
N	25	24	23	25	
MALE PUPS					
MEAN	17.57	17.50	18.28	15.74	
S.D.	2.689	2.202	3.143	2.794	
N	25	23	23	25	
FEMALE PUPS					
MEAN	17.55	17.26	17.42	15.04**	
S.D.	2.104	2.057	2.613	2.520	
N	24	23	23	25	
<u>LACTATIONAL DAY 21 TO 28</u>					
ENTIRE LITTER					
MEAN	34.42	33.54	33.64	29.09**	
S.D.	3.431	3.606	3.147	3.568	
N	25	24	23	25	
MALE PUPS					
MEAN	36.57	35.76	36.11	31.01**	
S.D.	4.113	3.932	3.493	3.945	
N	25	23	23	25	
FEMALE PUPS					
MEAN	32.18	31.40	31.56	26.65**	
S.D.	3.095	3.709	3.353	3.702	
N	24	23	23	25	

\*\* Significantly different from control group (p < .01)



Table 39  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF PUP SURVIVAL INDICES

F2 PUPS				
GROUP: PPM	0.0	300.0	1000.0	2000.0
LIVE BIRTH INDEX				
MEAN	98.6	97.8	99.5	97.4
S.D.	3.41	3.63	2.45	3.94
N	25	24	23	25
4-DAY SURVIVAL INDEX				
MEAN	96.4	95.3	98.8	96.9
S.D.	9.31	9.07	2.69	5.31
N	25	24	23	25
7-DAY SURVIVAL INDEX				
MEAN	100.0	99.5	100.0	100.0
S.D.	0.00	2.55	0.00	0.00
N	25	24	23	25
14-DAY SURVIVAL INDEX				
MEAN	100.0	100.0	100.0	100.0
S.D.	0.00	0.00	0.00	0.00
N	25	24	23	25
21-DAY SURVIVAL INDEX				
MEAN	99.5	100.0	100.0	99.5
S.D.	2.50	0.00	0.00	2.50
N	25	24	23	25
28-DAY SURVIVAL INDEX				
MEAN	100.0	100.0	100.0	100.0
S.D.	0.00	0.00	0.00	0.00
N	25	24	23	25
LACTATION INDEX <sup>a</sup>				
MEAN	99.5	99.5	100.0	99.5
S.D.	2.50	2.55	0.00	2.50
N	25	24	23	25

None significantly different from control group  
The equations used for calculating pup survival indices are recorded in the protocol.  
<sup>a</sup> Litters were weaned on lactational day 21.



# BUSHY RUN RESEARCH CENTER

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## Quality Assurance Unit Study Inspection Summary

Test Substance: Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC)

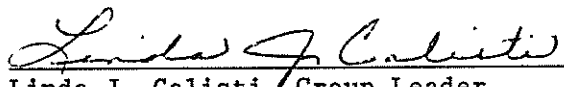
Two-Generation Reproduction  
Study: Study in Sprague-Dawley (CD®)  
Rats, Administered in the Diet

Study Director: T. L. Neeper-Bradley, Ph.D.

The Quality Assurance Unit of BRRC conducted the inspections listed below and reported the results to the study director and to management on the dates indicated. It is the practice of this Quality Assurance Unit to report the results of each inspection to both the study director and management.

<u>Date</u>	<u>Inspection Type</u>	<u>Date QAU Report Issued</u>	
		<u>To Study Director</u>	<u>To Management</u>
3-28 to 3-29-88	Protocol	3-29-88	3-30-88
8-16-88	Event-F0 Sacrifice	8-17-88	8-30-88
9-1-88	Event-F0 Female Necropsy	9-1-88	9-29-88
9-14-88	Event-Animal Weighing and Clinical Exam	9-16-88	9-29-88
9-14 to 9-19-88	Ongoing	9-26-88	10-3-88
9-15-88	Event-Diet Preparation	9-16-88	9-29-88
12-2-88	Event-Dead Check	12-5-88	12-14-88
1-9-89	Event-F1 Male Sacrifice	1-23-89	1-24-89
2-1-89	Event-F2 Weanling Sacrifice	2-1-89	3-28-89
7-21-89	Protocol Amendment #1	8-1-89	8-11-89
8-24 to 8-28-89	Anatomic Pathology Raw Data and Report	8-28-89	1-29-89

<u>Date</u>	<u>Inspection</u> <u>Type</u>	<u>Date QAU Report Issued</u>	
		<u>To Study Director</u>	<u>To Management</u>
8-11 to 8-29-89	Raw Data and Report Tables	8-30-89	1-29-90
8-25 to 8-29-89	Analytical Chemistry Raw Data and Report	8-30-89	1-29-90
9-20 to 9-26-89	Report	9-27-89	1-29-90
12-11-89	Revised Protocol Amendment #1	12-11-89	1-17-90
1-29-90	Archives	1-29-90	1-29-90

 1/30/90  
 Linda J. Calisti, Group Leader      Date  
 Good Laboratory Practices/Quality Assurance

APPENDIX 1

TITLE: Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC)  
Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Analytical Chemistry Report

(11 Pages)

APPENDIX 1

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Analytical Chemistry Report

SUMMARY

The concentration of ADBAC in rodent diet was determined using liquid chromatography. The dietary concentrations of ADBAC (as the active ingredient, alkyl dimethyl benzyl ammonium chloride) were 0, 300, 1000, and 2000 ppm. A stability study indicated that ADBAC was stable in rodent diet stored at ambient temperatures at concentrations of 300 and 2000 ppm for at least 14 days in open glass feed jars and stable for at least 21 days in closed polyethylene containers. The results from a homogeneity study indicated that the distribution of ADBAC in the test diets was uniform. Concentration verification analyses for the diets showed analytical values ranging from 94.7 to 109.0 percent of nominal for the three concentrations over the 40-week study period.

INTRODUCTION

A two-generation reproduction study with ADBAC in albino rats was conducted at the Bushy Run Research Center (BRRRC). The dietary concentrations of ADBAC for this study were 0, 300, 1000, and 2000 ppm. In conjunction with this study, the stability, homogeneity, and concentration verification of the ADBAC test diets were determined.

TEST SUBSTANCE

Five 5-gallon containers of test material were received from the Sponsor on November 11, 1987. The samples bore the Lot Number 7293K and were assigned BRRRC Sample Number 50-512 A through E. The material was a pale yellow, viscous liquid. Related correspondence stated this sample of the test material to be 81.09 percent active ingredient. All weights of the test material were corrected for percent active ingredient.

EQUIPMENT

A Waters High Pressure Liquid Chromatograph (HPLC) equipped with a Waters Model 481 Lambda Max Variable Wavelength Detector or Waters 484 Tunable Absorbance Detector, Waters Automated Gradient Controller, a WISP (Waters Intelligent Sample Processor), and a Hewlett-Packard 3392A Integrator was used for all analyses. The HPLC operating parameters are listed in Table 1.

## METHODS

The following procedure for the determination of ADBAC in rodent diets is a modification of the method provided by Ecolabs Inc. (dated October 1986).

### Mobile Phase Preparation

A 0.9 N phosphoric acid solution in Millipore® water was prepared as needed throughout the study. Mobile phase was prepared as needed for analysis as follows. Approximately 2000 ml of methanol and 500 ml of Millipore® water were filtered using a glass Millipore® filtering apparatus and a Millipore® HA 0.45 um filter. Sodium perchlorate (28.0920 g) was weighed into a 50 ml beaker, then transferred to a 600 ml beaker with 400 ml of the filtered water. The solution was mixed and the final pH adjusted to approximately 2.5 with 0.9 N phosphoric acid. The solution was filtered and transferred to a 2000 ml volumetric flask and diluted to volume with the filtered methanol. After mixing, additional methanol was added to bring the solution to volume. The contents of the flask were transferred to a 2 liter Erlenmeyer flask containing a stir bar and mixed continuously.

After each analysis session, the HPLC column was flushed with 0.02% sodium azide solution in Millipore® water.

### Determination of Extraction Efficiency

Spiking solutions were prepared as needed by dissolving the appropriate amount of ADBAC in methanol. For all stability, homogeneity, and concentration verification analyses (Weeks 1-19), five grams of control diet was weighed into a 125 ml Erlenmeyer flask and spiked with 2 ml of the appropriate spiking solution for determination of extraction efficiency. The spiked diet was allowed to incubate open at room temperature for 1 hour prior to extraction.

Beginning with Study Week 20 diet concentration verification analyses and for all subsequent testing, five grams of control diet was weighed into a 125 ml Erlenmeyer flask and spiked with 1 ml of the appropriate spiking solution for determination of extraction efficiency. The spiked diet was allowed to incubate open at room temperature for 1 hour prior to extraction. This procedure was employed in order to minimize the volume of solvent applied to the control diet.

### Extraction Procedures

Five grams of each test diet was weighed into a 125 ml glass Erlenmeyer flask equipped with a stopper. Each spiked and test diet was extracted with 25 ml of methanol for 15 minutes on a mechanical shaker. The extracts were filtered into 25 ml graduated cylinders using a glass funnel and Whatman 12.5 cm No. 1 filter paper.

For all stability, homogeneity, and concentration verification analyses (Weeks 1-15), each extract was appropriately diluted (v/v) with methanol:Millipore® water (8:2). Beginning with the Study Week 16 diet concentration verification analyses and for all subsequent analyses, each extract was appropriately diluted (w/w) with methanol:Millipore® water (8:2).

#### Standard solutions

A standard stock solution of ADBAC in methanol (1 mg/ml) was prepared as needed by weighing 0.0309 g of ADBAC into a 25 ml volumetric flask and diluting to volume with methanol. For all stability, homogeneity, and concentration verification analyses (Weeks 1-15), a 12 ng/ul and a 40 ng/ul standard were prepared by diluting the stock solution (v/v) with methanol:Millipore® water (8:2).

Beginning with the Study Week 16 diet concentration verification analyses and for all subsequent analyses, a 12 ng/ul and a 40 ng/ul standard were prepared by diluting the stock solution (w/w) with methanol:Millipore® water (8:2).

The measured concentration of each sample was determined by obtaining a value calculated by comparing the peak area or peak height of the sample to the peak area or peak height of the appropriate standard and correcting for extraction efficiency. Three main HPLC peaks were found, all of which represent constituents of alkyl dimethyl benzyl ammonium chloride. These peaks elute in the following order and represent benzyldimethyldodecylammonium-bromide, benzyldimethyltetradecylammoniumchloride, and benzyldimethylammonium-chloride. The diets were quantitated using the benzyldimethyltetradecyl-ammoniumchloride peak.

### RESULTS

#### Stability Study

Table 2 contains a summary of results from the stability study of ADBAC in rodent diet. Test diets (300 and 2000 ppm) were analyzed for ADBAC concentration at 0, 7, and 14 days in open glass feed jars and 0, 7, 14, and 21 days in closed polyethylene containers. These diets were stored at ambient temperatures. The measured concentrations over the 4 sampling periods for the 300 and 2000 ppm diets ranged from 101.3 to 104.7 and 103.4 to 106.4 percent of nominal, respectively. These results indicated that ADBAC was stable in the diet for at least 14 days in open glass feed jars and stable for at least 21 days in closed polyethylene containers.

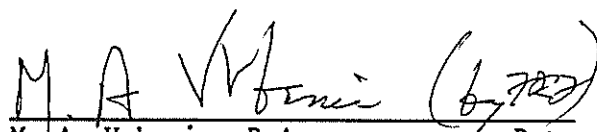
### Homogeneity Study

The homogeneity of the test diets was evaluated to ensure that ADBAC was uniformly distributed throughout the diet by the proposed mixing procedure. Three samples were taken from three separate areas (top, middle, and bottom) of the mixing bowl for the 300 and 2000 ppm diets. One sample, analyzed in duplicate, was taken from three separate areas (top, middle, and bottom) of the mixing bowl for the 1000 ppm diet. The mean ( $\pm$  SD) concentrations of ADBAC in the 300, 1000, and 2000 ppm diet preparations were 109.0 ( $\pm$  4.4), 105.8 ( $\pm$  4.7), and 108.0 ( $\pm$  2.6) percent of nominal, respectively. These results show that the test material was homogeneously distributed in the diets and are presented in Table 3.

### Concentration Verification

Table 4 contains a summary of the results for the concentration verification analyses of ADBAC test diets. Diets were prepared weekly. Each week, for the first four weeks of the study, duplicate samples of each diet were analyzed for concentration of ADBAC prior to administration to the animals. Thereafter, all diets prepared every fourth week were analyzed in duplicate for ADBAC concentration. The mean measured concentrations for all test diets ranged from 94.7 to 109.0 percent of nominal over the 40-week period. No ADBAC was detected in any of the control diet samples.

Prepared and Reviewed by:

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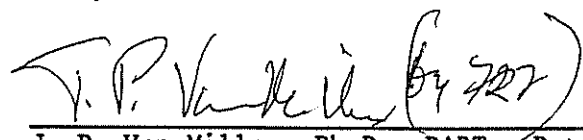
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Table 1

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

HPLC Operating Parameters

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Instrument:	Waters High Pressure Liquid Chromatograph
Detector:	Waters Lambda Max 481 Variable Wavelength or Waters 484 Tunable Absorbance Detector
Column:	Waters $\mu$ Bondapak C-18, (3.9 mm x 30 cm)
Column Temperature:	Ambient
Mobile Phase:	0.1 M NaClO <sub>4</sub> in methanol/Millipore® water (8:2) pH = ~2.5, (acidified with 0.9 N phosphoric acid in Millipore® water)
Flowrate:	2.0 ml/min
Wavelength:	220 nm
Minimum Detection Limit	~50 ppm

---

Table 2

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Results of Stability Studies

<u>Nominal Concentration = 300 ppm</u>				
<u>Date of Analysis<sup>a</sup></u>	<u>Stability Day</u>	<u>Storage Condition<sup>b</sup></u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
03-09-88	0	Room Temperature	314 ± 10 (n=9)	104.6
03-16-88	7	Open	305 ± 16 (n=3)	101.6
		Closed	313 ± 14 (n=3)	104.4
03-23-88	14	Open	303 ± 8 (n=3)	101.3
		Closed	313 ± 16 (n=3)	104.3
03-30-88	21	Closed	314 ± 11 (n=3)	104.7

<sup>a</sup>The date of analysis is the day the samples were extracted.

<sup>b</sup>Diets were stored at room temperature in open glass jars ("open") or polyethylene containers ("closed").

Table 2 (continued)

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Results of Stability Studies

<u>Nominal Concentration = 2000 ppm</u>				
<u>Date of Analysis<sup>a</sup></u>	<u>Stability Day</u>	<u>Storage Condition<sup>b</sup></u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
03-09-88	0	Room Temperature	2119 ± 81 (n=9)	106.0
03-16-88	7	Open	2127 ± 73 (n=3)	106.4
		Closed	2098 ± 15 (n=3)	104.9
03-23-88	14	Open	2070 ± 70 (n=3)	103.5
		Closed	2105 ± 63 (n=3)	105.2
03-30-88	21	Closed	2068 ± 17 (n=3)	103.4

<sup>a</sup>The date of analysis is the day the samples were extracted.

<sup>b</sup>Diets were stored at room temperature in open glass jars ("open") or polyethylene containers ("closed").

Table 3

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Results of Homogeneity Studies<sup>a</sup>

<u>Area of Sampling</u>	<u>Nominal Concentration (ppm)</u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
Top-1	300	339	113.0
Top-2	300	324	108.0
Top-3	300	336	112.0
Middle-1	300	306	102.0
Middle-2	300	317	105.7
Middle-3	300	343	114.3
Bottom-1	300	334	111.3
Bottom-2	300	311	103.7
Bottom-3	300	333	111.0
Mean		327	109.0
Standard Deviation		13	4.4

<u>Area of Sampling</u>	<u>Nominal Concentration (ppm)</u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
Top-1	1000	1099	109.9
Top-2	1000	1038	103.8
Middle-1	1000	985	98.5
Middle-2	1000	1051	105.1
Bottom-1	1000	1058	105.8
Bottom-2	1000	1116	111.6
Mean		1058	105.8
Standard Deviation		47	4.7

<sup>a</sup>The diets analyzed for homogeneity were prepared for actual dosing for Study Week 1 and were analyzed on 04-14-88.

Table 3 (Continued)

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Results of Homogeneity Studies<sup>a</sup>

<u>Area of Sampling</u>	<u>Nominal Concentration (ppm)</u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
Top-1	2000	2177	108.8
Top-2	2000	2198	109.9
Top-3	2000	2172	108.6
Middle-1	2000	2179	108.9
Middle-2	2000	2076	103.8
Middle-3	2000	2236	111.8
Bottom-1	2000	2192	109.6
Bottom-2	2000	2112	105.6
Bottom-3	2000	2100	105.0
Mean		2160	108.0
Standard Deviation		52	2.6

<sup>a</sup>The diets analyzed for homogeneity were prepared for actual dosing for Study Week 1 and were analyzed on 04-14-88.

Table 4

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Results of Concentration Verifications<sup>a</sup>

<u>Date of Analysis<sup>b</sup></u>	<u>Study Week</u>	<u>Nominal Concentration (ppm)</u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
04-14-88	1	300 <sup>c</sup>	327	109.0
		1000 <sup>d</sup>	1058	105.8
		2000 <sup>c</sup>	2160	108.0
04-21-88	2	300	288	96.2
		1000	1070	107.0
		2000	2126	106.3
04-28-88	3	300	326	108.8
		1000	994	99.4
		2000	2022	101.1
05-05-88	4	300	322	107.5
		1000	956	95.6
		2000	2002	100.1
06-01-88	8	300	310	103.5
		1000	956	95.6
		2000	2104	105.2
06-30-88	12	300	286	95.3
		1000	1033	103.3
		2000	2125	106.3
07-28-88	16	300	326	108.8
		1000	1079	107.9
		2000	1894	94.7
08-25-88	20	300	302	100.8
		1000	1010	101.0
		2000	2041	102.0

<sup>a</sup>Measured concentration and % of nominal reported as a mean of duplicate analyses.

<sup>b</sup>The date of analysis is the day the samples were extracted.

<sup>c</sup>Measured concentration and % of nominal reported as a mean of 9 samples analyzed for homogeneity.

<sup>d</sup>Measured concentration and % of nominal reported as a mean of 6 samples analyzed for homogeneity.

Table 4 (continued)

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats  
with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

Results of Concentration Verifications<sup>a</sup>

<u>Date of Analysis<sup>b</sup></u>	<u>Study Week</u>	<u>Nominal Concentration (ppm)</u>	<u>Measured Concentration (ppm)</u>	<u>% of Nominal</u>
09-22-88	24	300	306	102.2
		1000	1008	100.8
		2000	2000	100.0
10-20-88	28	300	321	107.1
		1000	1053	105.3
		2000	2052	102.6
11-17-88	32	300	288	96.0
		1000	1046	104.6
		2000	1998	99.9
12-15-88	36	300	302	100.7
		1000	1025	102.5
		2000	2030	101.5
01-12-89	40	300	317	105.6
		1000	1039	103.9
		2000	2011	100.6

<sup>a</sup>Measured concentration and % of nominal reported as a mean of duplicate analyses.

<sup>b</sup>The date of analysis is the day the samples were extracted.

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APPENDIX 2

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with  
Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC)  
Administered in the Diet

Anatomic Pathology Report

(116 Pages)



APPENDIX 2

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with  
Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC)  
Administered in the Diet

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Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with  
Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC)  
Administered in the Diet

Anatomic Pathology Report

SUMMARY AND CONCLUSIONS

Two generations of male and female Sprague-Dawley CD® rats were exposed to 0.0 (control), 300.0, 1000.0 or 2000.0 ppm of alkyl dimethyl benzyl ammonium chloride (ADBAC) administered in their feed throughout the study to determine and evaluate any possible alterations in parental fertility, maternal pregnancy and lactation, and growth and development of the offspring for two generations, one litter per generation.

All adult rats selected as parents from both the F0 and F1 generations (both sacrificed animals and those which died on study) received complete necropsies at the time of death with selected tissues being saved and fixed for possible microscopic evaluation. Microscopic examinations were carried out on selected tissues of all adult rats from the control and high dose groups, on any intermediate or low dose group adult rats which died during the study or which had gross lesions of target organs, and on adult male rats from the low and intermediate dose groups which failed to sire a litter.

Selected weanling rats from both the F1 and F2 generations were sacrificed and received complete necropsies.

There were no gross or microscopic lesions found in either parental or weanling rats which were attributable to ADBAC exposure.

INTRODUCTION

Male and female Sprague-Dawley CD® rats, obtained from Charles River Breeding Laboratories, Kingston, NY, were randomly assigned to four groups, 28 rats per sex per group. They comprised the F0 parental generation. The F0 and F1 rats selected as parents were fed 0.0, 300.0, 1000.0 or 2000.0 ppm of ADBAC mixed in their feed for a minimum of a 10-week prebreeding period, plus one breeding, pregnancy, and lactation (females only) cycle for each generation. Adult males were sacrificed after completion of parturition. Adult females were sacrificed after the weaning of their litters.

Twenty-eight rats per sex per group were randomly selected from the F1 weanlings to form the F1 parental generation. These animals were continued on the same dosing regime as their parents through a prebreeding period plus one mating, pregnancy and lactation cycle as above. An additional ten rats per sex per group from the F1 generation weanlings plus ten rats per sex per group from the F2 weanlings were sacrificed and received complete necropsies.

## METHODS

### Necropsy

Euthanasia of adult rats was performed by severing the brachial blood vessels to permit exsanguination following anesthesia with methoxyflurane. Dead rats were necropsied as they were found. A complete necropsy was performed on each rat. The following tissues were collected and fixed in 10% neutral buffered formalin:

Vagina (females)	Testes (males)
Uterus (females)	Epididymides (males)
Ovaries (females)	Seminal Vesicles (males)
Gross Lesions	Prostate (males)

Weanling rats selected for necropsy were euthanized and necropsied in the same manner as the adults, but only gross lesions were collected and saved in fixative.

### Histopathology

Histologic examination was performed on the above tissues of all F0 and F1 adult rats from the high dose and control groups, on any rats which died from the remaining groups, and on any of the above tissues containing gross lesions from the low and intermediate dose group animals. In addition, the testes and epididymides from adult males which failed to sire a litter were also examined microscopically for the low and intermediate dose group animals.

Tissues were embedded in paraffin, sectioned at 5-6 microns and stained with hematoxylin and eosin.

The frequency of histologic lesions was compared between each exposure group of sacrificed rats and the control group using the Fisher's exact test. The fiducial limit of 0.05 (two-tailed) was used as the critical level of significance.

## RESULTS AND DISCUSSION

The gross lesions found in this study are listed in Tables 1 and 2 (F0 adults), 3 through 6 (F1 adults), and 13 through 16 (F1 and F2 weanlings). Lesions of regularly sacrificed rats and those which died or were sacrificed moribund on study are listed separately. Gross lesions were infrequent in all groups and tended to be limited to changes in color, size, shape, or contour of various organs or tissues. There were no gross lesions in any parental or weanling rats which were attributed to ADBAC exposure.

Occasional adult male rats from various groups were noted to have size variation of one or both testes including one 300.0 ppm group F0 and three control group F1 males (size decrease), and one 2000.0 ppm group F1 male (size increase). Two rats (one 1000.0 ppm group F0 male and one 2000.0 ppm group F1 male) had lesions described grossly as epididymal abscesses, which proved microscopically to be sperm granulomas. Changes in color, contour, or size were also noted in occasional rats for either the prostate (one 1000.0 ppm F0 male--color and contour change, and one 0.0 ppm F0 male--size decrease) or seminal vesicles (one 2000.0 ppm F1 male which was sacrificed moribund--size decrease).

Gross lesions of reproductive organs of parental females involved only one rat, a 300.0 ppm group F1 female, with an ovarian cyst.

Three adult rats failed to survive to their scheduled sacrifice. One F1 2000.0 ppm group male was sacrificed moribund due to a cage accident which resulted in damage to its incisors and a malocclusion which interfered with eating. Two F1 females (one control group and one 300.0 ppm group) were found dead prior to commencement of the prebreed treatment period. No gross or microscopic cause of death was found for the control group rat. The 300.0 ppm group F1 female had pallor, dyspnea, abdominal distention and dehydration noted clinically, and liver and spleen size increase and lung and mediastinal lymph node color change observed grossly at necropsy.

Gross lesions of weanling rats of both sexes from both the F1 and F2 generations, when they occurred, affected one or two animals per group and were randomly distributed among the various treatment groups with no relationship to chemical exposure.

The microscopic lesions found in this study are listed in Tables 7 and 8 (F0 adults), and 9 through 12 (F1 adults). Lesions of regularly-sacrificed animals and those which died or were sacrificed moribund on study are listed in separate tables. There were no microscopic lesions found which were attributed to ADBAC exposure.

Microscopic lesions of most tissues and organs occurred infrequently and, other than the lesions previously discussed for the F1 300.0 ppm group female rat which died during the study, were of minor biologic significance. The latter animal had lymphosarcoma affecting its liver, spleen, and mediastinal fat. It is believed to be an incidental occurrence not related to chemical exposure.

The incidence of inflammatory lesions (vaginitis, seminal vesiculitis, prostatitis, and epididymitis), or degenerative lesions (seminiferous tubular atrophy, epididymal or testicular sperm granulomas, ovarian cysts, vaginal mucosal vacuolation, and uterine perivascular fibrosis, hemosiderosis, or luminal ectasia) were not significantly increased in treated animals compared to controls and were considered to have occurred with the normal frequency expected for rats of this strain, age, and breeding history. Hemosiderosis and perivascular fibrosis of the uterus are lesions associated with former placentation sites and are commonly found in recently-littered female rats.

Two males from the F0 generation and 15 males from the F1 generation from various chemical exposure groups failed to sire litters during this study. Of these animals, one 300.0 ppm group F0 male and one control group and one 300.0 ppm group F1 male each had moderate or marked bilateral seminiferous tubular atrophy of the testes. There were no microscopic lesions found in the epididymides or testes of any of the other adult males to explain their infertility.

One 2000.0 ppm group F0 male, noted grossly to have a nodule of its nonglandular stomach, was found to have a keratin cyst. One control group F0 male had a skin papilloma. Both lesions are considered to be incidental findings.

Alkyl dimethyl benzyl ammonium chloride was found to produce no toxic changes to the reproductive organs or to other examined tissues of adult or weanling rats in this test system.

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**Report Preparation**

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PATH/esk/1746P-1

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

FO ADULT MALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	28
STOMACH NODULE	0	0	0	1
LIVER ANOMALY	1	0	0	0
COLON PARASITE	3	2	2	0
SKIN CRUST	0	2	1	0
PAPILLOMA	1	0	0	0
ABSCCESS	1	0	0	0
ALOPECIA	0	0	1	0
PAWS/FEET SWOLLEN	0	0	1	0
LYMPH ND, S-MAN SIZE INCREASE	6	1	4	3
LYMPH ND, MED SIZE INCREASE	0	0	1	0
LYMPH ND, PANC COLOR CHANGE, DIFFUSE SIZE INCREASE	0 0	1 1	0 0	0 0
TESTES SIZE DECREASE	0	1	0	0
EPIDIDYMIDES ABSCCESS	0	0	1	0



TABLE 1 (Continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

FO ADULT MALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	28
PROSTATE				
CONTOUR CHANGE	0	0	1	0
COLOR CHANGE, FOCAL/MULTIFOCAL	0	0	1	0
SIZE DECREASE	1	0	0	0
KIDNEYS				
HYDRONEPHROSIS	1	2	2	2
DIMPLED/PITTED	1	0	0	0
PATH/ESK/GMADBF0.TB1/*P/07-12-89				

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

FO ADULT FEMALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	28
COLON PARASITE	0	0	2	0
SKIN ALOPECIA	5	2	0	0
CRUST	0	1	1	1
LYMPH ND, S-MAN SIZE INCREASE	1	1	0	2
KIDNEYS HYDRONEPHROSIS	0	0	1	1
PATH/ESK/GFADBF0.TB2/*P/07-12-89				

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

F1 ADULT MALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	27
ORAL/PHARYNGEAL MALOCCLUSION	0	1	1	1
COLON PARASITE	0	1	0	0
SKIN ALOPECIA	0	0	0	1
NARES/NOSE CRUST	1	1	0	0
LYMPH ND, S-MAN SIZE INCREASE	0	1	3	3
LYMPH ND, MED SIZE INCREASE	0	0	1	0
EYE CRUST	1	2	1	4
TESTES SIZE DECREASE	3	0	0	0
SIZE INCREASE	0	0	0	1
EPIDIDYMIDES ABSCESS	0	0	0	1
KIDNEYS HYDRONEPHROSIS	0	1	1	2

PATH/ESK/GMADBF1.TB3/\*P/07-12-89

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

ALL ANIMALS FOUND DEAD/SACRIFICED MORIBUND  
F1 ADULT MALES

GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS FOUND DEAD/SACRIFICED MORIBUND	0	0	0	1
ORAL/PHARYNGEAL MALOCCLUSION	0	0	0	1
STOMACH COLOR CHANGE, FOCAL/MULTIFOCAL	0	0	0	1
JEJUNUM CONTENTS ABNORMAL	0	0	0	1
ILEUM CONTENTS ABNORMAL	0	0	0	1
CECUM CONTENTS ABNORMAL DILATATION/DISTENTION	0 0	0 0	0 0	1 1
ADRENAL GL COLOR CHANGE, DIFFUSE	0	0	0	1
SKIN STAINED	0	0	0	1
SPLEEN SIZE DECREASE	0	0	0	1
EYE DISCHARGE	0	0	0	1
SEMINAL VESICLE SIZE DECREASE	0	0	0	1
PATH/ESK/GMADBF1.TB4/*P/07-12-89				

TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

F1 ADULT FEMALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	27	27	28	28
ORAL/PHARYNGEAL MALOCCLUSION	0	0	1	0
STOMACH CONTENTS ABNORMAL	1	0	1	0
COLON PARASITE	1	1	1	0
SKIN ALOPECIA	2	1	0	1
ULCERATED	0	0	0	1
EARS COLOR CHANGE, DIFFUSE	0	1	0	0
THICKER THAN NORMAL	0	1	0	0
PAWS/FEET SWOLLEN	0	0	0	1
ALOPECIA	0	1	0	0
LYMPH ND, S-MAN SIZE INCREASE	1	0	0	2
LYMPH ND, MED COLOR CHANGE, DIFFUSE	0	1	0	0
SIZE INCREASE	0	1	0	0
EYE CRUST	0	0	1	2
OVARIES CYST	0	1	0	0

TABLE 5 (Continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

F1 ADULT FEMALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	27	27	28	28
KIDNEYS				
HYDRONEPHROSIS	1	0	2	2
SIZE INCREASE	0	0	1	0
URINARY BLADDER				
CONTENTS ABNORMAL	0	0	1	0
PATH/ESK/GFADBF1.TB5/*P/07-12-89				

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

F1 ADULT FEMALES ALL ANIMALS FOUND DEAD/SACRIFICED MORIBUND				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS FOUND DEAD/SACRIFICED MORIBUND	1	1	0	0
LIVER SIZE INCREASE	0	1	0	0
SPLEEN SIZE INCREASE	0	1	0	0
LYMPH ND, MED COLOR CHANGE, DIFFUSE	0	1	0	0
LUNGS COLOR CHANGE, FOCAL/MULTIFOCAL	0	1	0	0
PATH/EKS/GFADBF1.TB6/*P/07-12-89				

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

FO ADULT MALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	28
STOMACH				
TOTAL NUMBER EXAMINED	0	0	0	1
KERATIN CYST	0	0	0	1
LIVER				
TOTAL NUMBER EXAMINED	1	0	0	0
ANOMALOUS LOBULATION	1	0	0	0
CECUM				
TOTAL NUMBER EXAMINED	3	0	0	0
EXAMINED, UNREMARKABLE	2	0	0	0
NEMATODIASIS	1	0	0	0
SKIN				
TOTAL NUMBER EXAMINED	2	0	0	0
DERMATITIS	1	0	0	0
ULCERATION	1	0	0	0
ABSCCESS, CLITORAL/PREPUTIAL GLAND	1	0	0	0
#B PAPILLOMA	1	0	0	0
LYMPH ND, S-MAN				
TOTAL NUMBER EXAMINED	5	0	1	3
MISSING	1	0	0	0
SINUS HISTIOCYTOSIS	1	0	0	0
LYMPHOID HYPERPLASIA	5	0	1	3
PLASMACYTOSIS	4	0	1	3
TESTES				
TOTAL NUMBER EXAMINED	28	1	2	28
EXAMINED, UNREMARKABLE	27	0	2	28
SPERM GRANULOMA	1	0	0	0
SEMINIFEROUS TUBULE ATROPHY	1	1	0	0

1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)  
# = NEOPLASM, B = BENIGN  
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP



TABLE 7 (Continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

FO ADULT MALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	28
EPIDIDYMIDES				
TOTAL NUMBER EXAMINED	28	1	2	28
EXAMINED, UNREMARKABLE	27	1	1	28
GRANULOMATOUS EPIDIDYMITIS	1	0	1	0
SPERM GRANULOMA	0	0	1	0
COAGULATING GL				
TOTAL NUMBER EXAMINED	0	0	1	0
ADENITIS	0	0	1	0
PROSTATE				
TOTAL NUMBER EXAMINED	28	1	2	28
EXAMINED, UNREMARKABLE	19	0	1	22
PROSTATITIS	9	1	1	6
KIDNEYS				
TOTAL NUMBER EXAMINED	2	0	0	2
EXAMINED, UNREMARKABLE	1	0	0	0
HYDRONEPHROSIS	1	0	0	2
NEPHRITIS, INTERSTITIAL	1	0	0	0
TUBULAR BASOPHILIA	0	0	0	1

1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)  
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP

PATH/ESK/HMADBFO.TB7/\*P/07-12-89

TABLE 8  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

FO ADULT FEMALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	28
SKIN				
TOTAL NUMBER EXAMINED	5	0	0	1
EXAMINED, UNREMARKABLE	4	0	0	0
HYPERKERATOSIS	0	0	0	1
DERMATITIS	1	0	0	0
EPIDERMITIS	1	0	0	0
LYMPH ND, S-MAN				
TOTAL NUMBER EXAMINED	1	0	0	2
HISTIOCYTIC AGGREGATES	0	0	0	1
LYMPHOID HYPERPLASIA	1	0	0	2
PLASMACYTOSIS	1	0	0	2
UTERUS				
TOTAL NUMBER EXAMINED	28	0	0	28
EXAMINED, UNREMARKABLE	4	0	0	3
LUMINAL ECTASIA	4	0	0	5
EDEMA	0	0	0	1
HEMORRHAGE	0	0	0	1
HEMOSIDEROSIS	17	0	0	24
PERIVASCULAR FIBROSIS	13	0	0	13
VAGINA				
TOTAL NUMBER EXAMINED	28	0	0	28
EXAMINED, UNREMARKABLE	26	0	0	22
VAGINITIS	2	0	0	4
MUCOSAL VACUOLATION	1	0	0	3
KIDNEYS				
TOTAL NUMBER EXAMINED	0	0	0	1
HYDRONEPHROSIS	0	0	0	1

1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)  
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP

PATH/ESK/HFADBF0.TB8/\*P/07-12-89

TABLE 9  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

F1 ADULT MALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	27
SKIN				
TOTAL NUMBER EXAMINED	1	0	0	4
EXAMINED, UNREMARKABLE	1	0	0	3
EPIDERMITIS	0	0	0	1
LYMPH ND, S-MAN				
TOTAL NUMBER EXAMINED	0	0	0	3
HISTIOCYTIC AGGREGATES	0	0	0	1
LYMPHOID HYPERPLASIA	0	0	0	3
PLASMACYTOSIS	0	0	0	2
TESTES				
TOTAL NUMBER EXAMINED	28	5	5	27
EXAMINED, UNREMARKABLE	24	4	5	26
SEMINIFEROUS TUBULE ATROPHY	4	1	0	1
EPIDIDYMIDES				
TOTAL NUMBER EXAMINED	28	3	5	27
EXAMINED, UNREMARKABLE	28	3	5	26
SPERM GRANULOMA	0	0	0	1
SEMINAL VESICLE				
TOTAL NUMBER EXAMINED	28	0	0	27
EXAMINED, UNREMARKABLE	27	0	0	27
SEMINAL VESICULITIS	1	0	0	0
1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)				
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP				

TABLE 9 (Continued)  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 SUMMARY OF MICROSCOPIC DIAGNOSES

F1 ADULT MALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	28	28	28	27
PROSTATE				
TOTAL NUMBER EXAMINED	28	0	0	27
EXAMINED, UNREMARKABLE	19	0	0	22
PROSTATITIS	9	0	0	5
KIDNEYS				
TOTAL NUMBER EXAMINED	0	0	0	2
HYDRONEPHROSIS	0	0	0	2
TUBULAR PROTEINOSIS	0	0	0	1
NEPHRITIS, INTERSTITIAL	0	0	0	2
TUBULAR BASOPHILIA	0	0	0	2
1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)				
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP				
PATH/ESK/HMADBF1.TB9/*P/07-19-89				

TABLE 10  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

F1 ADULT MALES ALL ANIMALS FOUND DEAD/SACRIFICED MORIBUND				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS FOUND DEAD/SACRIFICED MORIBUND	0	0	0	1
ADRENAL GL				
TOTAL NUMBER EXAMINED	0	0	0	1
CONGESTION	0	0	0	1
SKIN				
TOTAL NUMBER EXAMINED	0	0	0	1
EXAMINED, UNREMARKABLE	0	0	0	1
SPLEEN				
TOTAL NUMBER EXAMINED	0	0	0	1
CONTRACTED SPLEEN	0	0	0	1
LYMPHOID DEPLETION	0	0	0	1
TESTES				
TOTAL NUMBER EXAMINED	0	0	0	1
EXAMINED, UNREMARKABLE	0	0	0	1
EPIDIDYMIDES				
TOTAL NUMBER EXAMINED	0	0	0	1
EXAMINED, UNREMARKABLE	0	0	0	1
SEMINAL VESICLE				
TOTAL NUMBER EXAMINED	0	0	0	1
EXAMINED, UNREMARKABLE	0	0	0	1
PROSTATE				
TOTAL NUMBER EXAMINED	0	0	0	1
EXAMINED, UNREMARKABLE	0	0	0	1
1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)				
PATH/ESK/HMADBF1.T10/*P/07-12-89				

TABLE 11  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

F1 ADULT FEMALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	27	27	28	28
SALIVARY GL				
TOTAL NUMBER EXAMINED	0	0	0	1
EXAMINED, UNREMARKABLE	0	0	0	1
SKIN				
TOTAL NUMBER EXAMINED	2	0	0	4
EXAMINED, UNREMARKABLE	1	0	0	2
HYPERKERATOSIS	1	0	0	1
DERMATITIS	0	0	0	1
EPIDERMITIS	1	0	0	0
ULCERATION	0	0	0	1
DERMAL FIBROSIS	0	0	0	1
MAMMARY GL				
TOTAL NUMBER EXAMINED	0	0	0	1
HYPERPLASIA	0	0	0	1
PAWS/FEET				
TOTAL NUMBER EXAMINED	0	0	0	1
OSTEOARTHRITIS	0	0	0	1
LYMPH ND, S-MAN				
TOTAL NUMBER EXAMINED	1	0	0	2
LYMPHOID DEPLETION	0	0	0	1
LYMPHOID HYPERPLASIA	0	0	0	1
PLASMACYTOSIS	1	0	0	2
HISTIOCYTIC AGGREGATES	1	0	0	1
OVARIES				
TOTAL NUMBER EXAMINED	27	1	0	28
EXAMINED, UNREMARKABLE	25	0	0	26
CYST(S), OVARIAN BURSA(E)	2	1	0	2

1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)  
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP

TABLE 11 (Continued)  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

F1 ADULT FEMALES				
GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS SACRIFICED	27	27	28	28
UTERUS				
TOTAL NUMBER EXAMINED	27	1	0	28
EXAMINED, UNREMARKABLE	7	0	0	5
LUMINAL ECTASIA	2	0	0	3
HEMOSIDEROSIS	19	1	0	20
PERIVASCULAR FIBROSIS	11	0	0	14
VAGINA				
TOTAL NUMBER EXAMINED	27	1	0	28
EXAMINED, UNREMARKABLE	19	1	0	16
VAGINITIS	8	0	0	7
VACUOLATED MUCOSA	0	0	0	5
KIDNEYS				
TOTAL NUMBER EXAMINED	1	0	0	2
HYDRONEPHROSIS	1	0	0	2
NEPHRITIS, INTERSTITIAL	0	0	0	1
FIBROSIS, INTERSTITIAL	0	0	0	1
TUBULAR BASOPHILIA	0	0	0	1
1= AD2R-W (0 PPM) 2=AD2R-X (300 PPM) 3=AD2R-Y(1000 PPM) 4=AD2R-Z(2000 PPM)				
NONE SIGNIFICANTLY DIFFERENT FROM CONTROL GROUP				
PATH/ESK/HFADBFI.T11/*P/07-12-89				

TABLE 12  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

ALL ANIMALS FOUND DEAD/SACRIFICED MORIBUND  
F1 ADULT FEMALES

GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS FOUND DEAD/SACRIFICED MORIBUND	1	1	0	0
ADIPOSE TISSUE				
TOTAL NUMBER EXAMINED	0	1	0	0
#M LYMPHOSARCOMA	0	1	0	0
LIVER				
TOTAL NUMBER EXAMINED	0	1	0	0
#M LYMPHOSARCOMA	0	1	0	0
SPLEEN				
TOTAL NUMBER EXAMINED	0	1	0	0
#M LYMPHOSARCOMA	0	1	0	0
LYMPH ND, MED				
TOTAL NUMBER EXAMINED	0	1	0	0
SINUS ERYTHROCYTOSIS	0	1	0	0
OVARIES				
TOTAL NUMBER EXAMINED	1	1	0	0
EXAMINED, UNREMARKABLE	1	1	0	0
UTERUS				
TOTAL NUMBER EXAMINED	1	1	0	0
EXAMINED, UNREMARKABLE	1	1	0	0
VAGINA				
TOTAL NUMBER EXAMINED	1	1	0	0
EXAMINED, UNREMARKABLE	1	1	0	0
1= AD2R-W (0 PPM)    2=AD2R-X (300 PPM)    3=AD2R-Y(1000 PPM)    4=AD2R-Z(2000 PPM)				
# = NEOPLASM, M = MALIGNANT				



TABLE 12 (Continued)

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF MICROSCOPIC DIAGNOSES

ALL ANIMALS FOUND DEAD/SACRIFICED MORIBUND  
F1 ADULT FEMALES

GROUP:	1	2	3	4
NUMBER OF ANIMALS IN DOSE GROUP	28	28	28	28
NUMBER OF ANIMALS FOUND DEAD/SACRIFICED MORIBUND	1	1	0	0
LUNGS				
TOTAL NUMBER EXAMINED	0	1	0	0
HEMORRHAGE	0	1	0	0
PNEUMONITIS, INTERSTITIAL	0	1	0	0
1= AD2R-W (0 PPM)    2=AD2R-X (300 PPM)    3=AD2R-Y(1000 PPM)    4=AD2R-Z(2000 PPM)				
PATH/ESK/HFADBF1.T12/*P/07-12-89				

TABLE 13  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 SUMMARY OF NECROPSY OBSERVATIONS

F1 WEANLING MALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	10	10	10	10
NUMBER OF ANIMALS SACRIFICED	10	10	10	10
COLON PARASITE	2	1	1	0
PAWS/FEET ERROR IN TOE CLIPPING	0	0	1	0
KIDNEYS HYDRONEPHROSIS	1	0	0	1
PATH/ESK/GWMADB1.T13/*P/07-12-89				

TABLE 14  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

F1 WEANLING FEMALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	10	10	10	10
NUMBER OF ANIMALS SACRIFICED	10	10	10	10
COLON PARASITE	0	1	1	0
KIDNEYS HYDRONEPHROSIS	0	0	1	0
PATH/ESK/GWFADB1.T14/*P/07-12-89				

TABLE 15  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
SUMMARY OF NECROPSY OBSERVATIONS

F2 WEANLING MALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	10	10	10	10
NUMBER OF ANIMALS SACRIFICED	10	10	10	10
COLON PARASITE	0	1	0	1
KIDNEYS HYDRONEPHROSIS	2	2	2	0
PATH/ESK/GWMADB2.T15/*P/07-12-89				

TABLE 16  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 SUMMARY OF NECROPSY OBSERVATIONS

F2 WEANLING FEMALES				
GROUP (PPM):	0.0	300.0	1000.0	2000.0
NUMBER OF ANIMALS IN DOSE GROUP	10	10	10	10
NUMBER OF ANIMALS SACRIFICED	10	10	10	10
STOMACH CONTENTS ABNORMAL	1	0	0	0
EARS SWOLLEN	0	0	0	1
KIDNEYS HYDRONEPHROSIS	0	1	2	2
PATH/ESK/GWFADB2.T16/*P/07-12-89				

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - FO ADULT MALES

The following tissues were examined at necropsy and histologically for all the high dose and control group males and for the remaining dose group males which had gross lesions of target organs (reproductive tract organs) with no significant lesions observed unless otherwise specified:

TOTAL BODY <sup>2</sup>	MESENTERY/OM'TUM <sup>2</sup>	PERITONEUM <sup>2</sup>	PERITONEAL CAV <sup>2</sup>	PLEURA <sup>2</sup>
THORACIC CAV <sup>2</sup>	HEART <sup>2</sup>	PERICARDIAL CAV <sup>2</sup>	AORTA <sup>2</sup>	SALIVARY GL <sup>2</sup>
ORAL/PHARYNGEAL <sup>2</sup>	TONGUE <sup>2</sup>	ESOPHAGUS <sup>2</sup>	STOMACH <sup>2</sup>	LIVER <sup>2</sup>
PANCREAS <sup>2</sup>	DUODENUM <sup>2</sup>	JEJUNUM <sup>2</sup>	ILEUM <sup>2</sup>	CECUM <sup>2</sup>
COLON <sup>2</sup>	RECTUM <sup>2</sup>	ANUS <sup>2</sup>	PITUITARY <sup>2</sup>	THYROID GL <sup>2</sup>
PARATHYROID GL <sup>2</sup>	ADRENAL GL <sup>2</sup>	SKIN <sup>2</sup>	SUBCUTIS <sup>2</sup>	HEAD <sup>2</sup>
EARS <sup>2</sup>	NARES/NOSE <sup>2</sup>	MAMMARY GL <sup>2</sup>	PAWS/FEET <sup>2</sup>	TAIL <sup>2</sup>
SPLEEN <sup>2</sup>	LYMPH ND, S-MAN <sup>2</sup>	LYMPH ND, MED <sup>2</sup>	LYMPH ND, MES <sup>2</sup>	THYMIC REGION <sup>2</sup>
BONE/JOINT <sup>2</sup>	BONE, STERNUM <sup>2</sup>	BONE, FEMUR <sup>2</sup>	BONE, VERTEBRA <sup>2</sup>	SKELETAL MUSCLE <sup>2</sup>
DIAPHRAGM <sup>2</sup>	BRAIN <sup>2</sup>	SPINAL CORD <sup>2</sup>	NERVE, SCIATIC <sup>2</sup>	EYE <sup>2</sup>
LACRYMAL GL <sup>2</sup>	TESTES <sup>2</sup>	EPIDIDYMIDES <sup>2</sup>	SEMINAL VESICLE	COAGULATING GL <sup>2</sup>
PROSTATE	PENIS <sup>2</sup>	LARYNX <sup>2</sup>	TRACHEA <sup>2</sup>	LUNGS <sup>2</sup>
KIDNEYS <sup>2</sup>	URETER <sup>2</sup>	URINARY BLADDER <sup>2</sup>	GROSS LESIONS	

<sup>1</sup> = Organ weights collected, <sup>2</sup> = examined at necropsy only, unless gross lesions present,  
<sup>3</sup> = examined microscopically for low and intermediate dose group males which failed to sire a litter.

Grade codes:

1=MINIMAL, 2=MILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCAL, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 0.0 PPM

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ANIMAL 7387A01 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

## LIVER

GROSS: ANOMALY

11X5 MM, LEFT MEDIAN LOBE  
MICRO: (P) ANOMALOUS LOBULATION

ANIMAL 7483A02 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7383A03 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7458A04 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

## LYMPH NO, S-MAN

GROSS: SIZE INCREASE

17X8 MM, ONE NODE

MICRO: 5 PLASMACYTOSIS

MICRO: 3 LYMPHOID HYPERPLASIA

(2) SINUS HISTIOCYTOSIS

ANIMAL 7450A05 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

## LYMPH NO, S-MAN

GROSS: SIZE INCREASE

2X NORMAL

MICRO: 5 PLASMACYTOSIS

MICRO: 3 LYMPHOID HYPERPLASIA

ANIMAL 7335A06 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

## TESTES

MICRO: ((4)) SPERM GRANULOMA

SAME TESTES

4 SEMINIFEROUS TUBULE ATROPHY

UNILATERAL

AFFECTS WHOLE TESTES

## PROSTATE

GROSS: SIZE DECREASE

RIGHT, 1/2 NORMAL

ANIMAL 7418A07 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 0.0 PPM

-----  
ANIMAL 7417A08 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7482A09 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7345A10 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: (2) PROSTATITIS

ANIMAL 7367A11 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((3)) PROSTATITIS

ANIMAL 7444A12 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7384A13 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
3X NORMAL, RIGHT SIDE  
MICRO+ 4 PLASMACYTOSIS  
MICRO: 3 LYMPHOID HYPERPLASIA  
PROSTATE  
MICRO: (2) PROSTATITIS  
KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MILD  
MICRO+ 1 HYDRONEPHROSIS  
MICRO: ((1)) NEPHRITIS, INTERSTITIAL

ANIMAL 7455A14 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
3X NORMAL, RIGHT  
EPIDIDYMIDES  
MICRO: (4) GRANULOMATOUS EPIDIDYMITIS  
AT THE BASE OF ONE EPIDIDYMS  
THE FOLLOWING TISSUES WERE MISSING:  
LYMPH ND, S-MAN

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 0.0 PPM

ANIMAL 7378A15 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

CECUM  
MICRO: P NEMATODIASIS  
COLON  
GROSS: PARASITE  
PINWORMS  
LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
3X NORMAL, ONE NODE  
MICRO+ 4 PLASMACYTOSIS  
MICRO: 3 LYMPHOID HYPERPLASIA  
PROSTATE  
MICRO: ((1)) PROSTATITIS

ANIMAL 7342A16 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7461A17 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7484A18 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
RIGHT SIDE, 3X NORMAL  
MICRO+ 3 LYMPHOID HYPERPLASIA

ANIMAL 7401A19 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PIN WORMS  
PROSTATE  
MICRO: ((2)) PROSTATITIS

ANIMAL 7395A20 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((1)) PROSTATITIS

ANIMAL 7475A21 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 0.0 PPM

ANIMAL 7389A22 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: (1) PROSTATITIS

ANIMAL 7341A23 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7464A24 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ABSCESS  
PREPUTIAL GLAND, 5X5X3MM, GREEN  
MATERIAL FILLED  
MICRO+ (4) ABSCESS, CLITORAL/PREPUTIAL GLAND  
PROSTATE  
MICRO: ((3)) PROSTATITIS

ANIMAL 7358A25 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7480A26 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7459A27 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

PROSTATE  
MICRO: ((2)) PROSTATITIS  
KIDNEYS  
GROSS: DIMPLED/PITTED  
RIGHT, 30X10MM, RAISED AREA

ANIMAL 7336A28 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: PAPILLOMA  
5X5X3MM, UPPER LIP  
MICRO+ (P) #B PAPILLOMA  
MICRO: (2) DERMATITIS  
UNDER PAPILLOMA  
DUE TO FOREIGN BODY (HAIR) BENEATH  
PAPILLOMA  
(3) ULCERATION  
PAPILLOMA

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 300.0 PPM

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ANIMAL 7447B01 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7425B02 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: CRUST  
LEFT PERIOCLAR AREA, RED  
MICRO: NOT EXAMINED

ANIMAL 7421B03 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7339B04 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7467B05 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
RIGHT SIDE, 2X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 7424B06 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7446B07 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7481B08 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7393B09 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7373B10 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 300.0 PPM

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ANIMAL 7414B11 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7416B12 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7430B13 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7347B14 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MARKED  
MICRO: NOT EXAMINED

ANIMAL 7449B15 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7371B16 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 7356B17 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7477B18 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO, PANC  
GROSS: COLOR CHANGE, DIFFUSE  
LIGHT RED  
LYMPH-NO, PANC  
GROSS: SIZE INCREASE  
3X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 7354B19 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 300.0 PPM

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ANIMAL 7405820 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

## TESTES

GROSS: SIZE DECREASE

1/2 OF NORMAL, BILATERAL

MICRO+((4)) SEMINIFEROUS TUBULE ATROPHY

BILATERAL, INVOLVES ONE THIRD TO ONE  
HALF OF EACH TESTES

## PROSTATE

MICRO: ((2)) PROSTATITIS

ANIMAL 7366821 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7396822 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

## SKIN

GROSS: CRUST

PERIOULAR AREA, BILATERAL, RED

MICRO: N O T E X A M I N E D

ANIMAL 7468823 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

## COLON

GROSS: PARASITE

PIN WORMS

MICRO: N O T E X A M I N E D

ANIMAL 7453824 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7402825 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7388826 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

## KIDNEYS

GROSS: HYDRONEPHROSIS

RIGHT, MILD

MICRO: N O T E X A M I N E D

ANIMAL 7473827 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 300.0 PPM

-----  
ANIMAL 7462B2B 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 1000.0 PPM

ANIMAL 7346C01 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7340C02 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
15X8 MM AND 15X6 MM, TWO NODES  
MICRO: NOT EXAMINED

ANIMAL 7400C03 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7422C04 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 7429C05 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7428C06 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: CRUST  
LEFT PERIOcular AREA, RED  
MICRO: NOT EXAMINED

ANIMAL 7439C07 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

PAWS/FEET  
GROSS: SWOLLEN  
BILATERAL, ANKLE AREA, SLIGHT  
LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO+ 4 PLASMOCYTOSIS  
MICRO: 3 LYMPHOID HYPERPLASIA  
EPIDIDYIMIDES  
GROSS: ABSCESS  
POSTERIOR END, 5MM IN DIAMETER  
FILLED WITH THICK GREEN MATERIAL  
RIGHT  
MICRO+ (4) SPERM GRANULOMA

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 1000.0 PPM

-----  
ANIMAL 7439C07 (CONTINUED)

MICRO: (3) GRANULOMATOUS EPIDIDYMITIS

ANIMAL 7451C08 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 7431C09 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 7438C10 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 7478C11 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN

GROSS: ALOPECIA

13X7 MM, CHEST REGION

MICRO: NOT EXAMINED

ANIMAL 7381C12 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN

GROSS: SIZE INCREASE

16X11 MM, 15X8 MM, TWO NODES

LYMPH ND, MED

GROSS: SIZE INCREASE

3X NORMAL, ONE NODE

MICRO: NOT EXAMINED

ANIMAL 7466C13 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 7386C14 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 7427C15 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

COAGULATING GL

MICRO: 3 ADENITIS

PROSTATE

GROSS: CONTOUR CHANGE

SLIGHTLY ENLARGED, IRREGULAR SURFACE

PROSTATE

GROSS: COLOR CHANGE, FOCAL/MULTIFOCAL

MOTTLED YELLOW-TAN

MICRO+ 5 PROSTATITIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 1000.0 PPM

ANIMAL 7427C15 (CONTINUED)

ENTIRE GLAND ABSCESED

ANIMAL 7359C16 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS

GROSS:

HYDRONEPHROSIS

RIGHT, MILD

MICRO: N O T

E X A M I N E D

ANIMAL 7391C17 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7406C18 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7380C19 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7399C20 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7437C21 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7452C22 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO. S-MAN

GROSS:

SIZE INCREASE

RIGHT, 2X NORMAL, LEFT, 4X NORMAL

MICRO: N O T

E X A M I N E D

ANIMAL 7472C23 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7350C24 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

ANIMAL 7385C25 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DANLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 1000.0 PPM

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ANIMAL 7404C26 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON

GROSS:

PARASITE

PINWORMS

MICRO: N O T

E X A M I N E D

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ANIMAL 7363C27 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

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ANIMAL 7440C28 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS

GROSS:

HYDRONEPHROSIS

SEVERE WITH GREEN FLUID, LEFT

MICRO: N O T

E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 2000.0 PPM

ANIMAL 7348D01 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE

MICRO: ((2)) PROSTATITIS

ANIMAL 7469D02 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7351D03 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

PROSTATE

MICRO: (2) PROSTATITIS

KIDNEYS

GROSS: HYDRONEPHROSIS  
SEVERE, RIGHT

MICRO+ 3 HYDRONEPHROSIS

MICRO: (1) TUBULAR BASOPHILIA

ANIMAL 7436D04 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7355D05 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7434D06 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7410D07 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7372D08 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE

MICRO: ((2)) PROSTATITIS

ANIMAL 7390D09 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS

GROSS: HYDRONEPHROSIS  
BILATERAL, MILD

MICRO+ 3 HYDRONEPHROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 2000.0 PPM

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ANIMAL 7443D10 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7413D11 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
RIGHT SX NORMAL  
MICRO: 4 LYMPHOID HYPERPLASIA  
MICRO: 4 PLASMACYTOSIS

ANIMAL 7403D12 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7344D13 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7398D14 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7454D15 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7476D16 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7360D17 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: (2) PROSTATITIS

ANIMAL 7460D18 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: (2) PROSTATITIS

ANIMAL 7441D19 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 2000.0 PPM

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ANIMAL 7392020 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

## STOMACH

## GROSS:

## NODULE

NON GLANDULAR PORTION, CREAM 4MM IN  
DIAMETER

## MICRO+ (P)

## KERATIN CYST

NONGLANDULAR STOMACH

## PROSTATE

## MICRO: (1)

## PROSTATITIS

ANIMAL 7337021 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7412022 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

## LYMPH ND, S-MAN

## GROSS:

## SIZE INCREASE

2X NORMAL, RIGHT AND LEFT

## MICRO+ 4

## PLASMACYTOSIS

## MICRO: 4

## LYMPHOID HYPERPLASIA

ANIMAL 7435023 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7379024 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

## LYMPH ND, S-MAN

## GROSS:

## SIZE INCREASE

RIGHT SIDE, 3X NORMAL

## MICRO+ 4

## PLASMACYTOSIS

## MICRO: 3

## LYMPHOID HYPERPLASIA

ANIMAL 7397025 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7445026 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7465027 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT MALES

GROUP: 2000.0 PPM

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ANIMAL 7362D28 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - FO ADULT FEMALES

The following tissues were examined at necropsy and histologically for the high dose and control group females and for any rats in the remaining dose groups which had gross lesions of target organs (reproductive tract organs) with no significant lesions observed unless otherwise specified:

TOTAL BODY <sup>2</sup>	MESENTERY/OM'TUM <sup>2</sup>	PERITONEUM <sup>2</sup>	PERITONEAL CAV <sup>2</sup>	PLEURA <sup>2</sup>
THORACIC CAV <sup>2</sup>	HEART <sup>2</sup>	PERICARDIAL CAV <sup>2</sup>	AORTA <sup>2</sup>	SALIVARY GL <sup>2</sup>
ORAL/PHARYNGEAL <sup>2</sup>	TONGUE <sup>2</sup>	ESOPHAGUS <sup>2</sup>	STOMACH <sup>2</sup>	LIVER <sup>2</sup>
PANCREAS <sup>2</sup>	DUODENUM <sup>2</sup>	JEJUNUM <sup>2</sup>	ILEUM <sup>2</sup>	CECUM <sup>2</sup>
COLON <sup>2</sup>	RECTUM <sup>2</sup>	ANUS <sup>2</sup>	PITUITARY <sup>2</sup>	THYROID GL <sup>2</sup>
PARATHYROID GL <sup>2</sup>	ADRENAL GL <sup>2</sup>	SKIN <sup>2</sup>	SUBCUTIS <sup>2</sup>	HEAD <sup>2</sup>
EARS <sup>2</sup>	NARES/NOSE <sup>2</sup>	MAMMARY GL <sup>2</sup>	PAWS/FEET <sup>2</sup>	TAIL <sup>2</sup>
SPLEEN <sup>2</sup>	LYMPH ND, S-MAN <sup>2</sup>	LYMPH ND, MED <sup>2</sup>	LYMPH ND, MES <sup>2</sup>	THYMIC REGION <sup>2</sup>
BONE/JOINT <sup>2</sup>	BONE, STERNUM <sup>2</sup>	BONE, FEMUR <sup>2</sup>	BONE, VERTEBRA <sup>2</sup>	SKELETAL MUSCLE <sup>2</sup>
DIAPHRAGM <sup>2</sup>	BRAIN <sup>2</sup>	SPINAL CORD <sup>2</sup>	NERVE, SCIATIC <sup>2</sup>	EYE <sup>2</sup>
LACRYMAL GL <sup>2</sup>	OVARIES	OVIDUCT <sup>2</sup>	UTERUS	CERVIX <sup>2</sup>
VAGINA	VULVA <sup>2</sup>	LARYNX <sup>2</sup>	TRACHEA <sup>2</sup>	LUNGS <sup>2</sup>
KIDNEYS <sup>2</sup>	URETER <sup>2</sup>	URINARY BLADDER <sup>2</sup>	GROSS LESIONS	

<sup>1</sup> = Organ weights collected, <sup>2</sup> = examined at necropsy only, unless gross lesions present.

Grade codes:

1=MINIMAL, 2=WILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCAL, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 0.0 PPM

ANIMAL 7529A01 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) LUMINAL ECTASIA  
(2) PERIVASCULAR FIBROSIS

ANIMAL 7634A02 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: 3 PLASMACYTOSIS  
2 LYMPHOID HYPERPLASIA  
UTERUS  
MICRO: ((4)) HEMOSIDEROSIS

ANIMAL 7505A03 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) PERIVASCULAR FIBROSIS

ANIMAL 7513A04 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT LEGS, BILATERAL  
UTERUS  
MICRO: (2) PERIVASCULAR FIBROSIS  
(2) HEMOSIDEROSIS

ANIMAL 7517A05 16-AUG-88 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSIS

ANIMAL 7601A06 14-AUG-88 STUDY DAY 116  
TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT LEGS, BILATERAL  
UTERUS  
MICRO: (2) PERIVASCULAR FIBROSIS

ANIMAL 7503A07 14-AUG-88 STUDY DAY 116  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (4) PERIVASCULAR FIBROSIS  
(1) HEMOSIDEROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 0.0 PPM

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ANIMAL 7611A08 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((4)) PERIVASCULAR FIBROSIS  
((3)) HEMOSIDEROSIS

ANIMAL 7605A09 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7593A10 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT PAWS, BILATERAL  
MICRO: ((1)) DERMATITIS  
(2) EPIDERMITIS  
UTERUS  
MICRO: 2 LUMINAL ECTASIA  
(3) HEMOSIDEROSIS

ANIMAL 7512A11 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (1) HEMOSIDEROSIS  
(2) PERIVASCULAR FIBROSIS

ANIMAL 7639A12 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS

ANIMAL 7628A13 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) LUMINAL ECTASIA

ANIMAL 7639A14 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) HEMOSIDEROSIS

ANIMAL 7618A15 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) PERIVASCULAR FIBROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 0.0 PPM

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ANIMAL 7555A16 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS

ANIMAL 7609A17 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (1) PERIVASCULAR FIBROSIS

ANIMAL 7643A18 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS

ANIMAL 7635A19 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS

ANIMAL 7629A20 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
BILATERAL, PARTIAL, FRONT PAMS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSIS

ANIMAL 7620A21 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
VAGINA  
MICRO: ((3)) MUCOSAL VACUOLATION  
((2)) VAGINITIS

ANIMAL 7511A22 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT LEGS, BILATERAL  
UTERUS  
MICRO: (3) HEMOSIDEROSIS

ANIMAL 7619A23 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: O.0 PPH

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ANIMAL 7522A24 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7563A25 14-AUG-88 STUDY DAY 116  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) HEMOSIDEROSIS

ANIMAL 7586A26 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
(4) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: 2 VAGINITIS

ANIMAL 7531A27 14-AUG-88 STUDY DAY 116  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: 2 LUMINAL ECTASIA

ANIMAL 7598A28 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 300.0 PPM

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ANIMAL 7621B01 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7509B02 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7532B03 17-AUG-88 STUDY DAY 119

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7508B04 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7538B05 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7579B06 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7537B07 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7574B08 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7627B09 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7561B10 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
PARTIAL, FRONT LEGS, BILATERAL  
MICRO: NOT EXAMINED

ANIMAL 7608B11 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 300.0 PPM

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ANIMAL 7564B12 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7630B13 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7518B14 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: CRUST  
RED, RIGHT PERIOCCULAR AREA  
LYMPH NO, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 7585B15 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7642B16 29-AUG-88 STUDY DAY 131  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7600B17 14-AUG-88 STUDY DAY 116  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7603B18 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7520B19 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7541B20 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7623B21 14-AUG-88 STUDY DAY 116  
TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 300.0 PPM

ANIMAL 7623821 (CONTINUED)

MICRO: NOT EXAMINED FRONT LEGS, BILATERAL

ANIMAL 7631822 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7578823 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7527824 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7524825 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7552826 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7590827 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7566828 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 1000.0 PPM

ANIMAL 7550C01 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7598C02 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7556C03 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7633C04 11-AUG-88 STUDY DAY 113  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7533C05 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 7504C06 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
LEFT MODERATE  
MICRO: NOT EXAMINED

ANIMAL 7582C07 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7624C08 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7542C09 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7543C10 15-AUG-88 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 1000.0 PPM

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ANIMAL 7572C11 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7573C12 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7616C13 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7540C14 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7617C15 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7565C16 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7516C17 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7625C18 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7626C19 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7559C20 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7546C21 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 1000.0 PPM

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ANIMAL 7571C22 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7606C23 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7498C24 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: CRUST  
RED, RIGHT PERIOCCULAR AREA  
MICRO: NOT EXAMINED

ANIMAL 7615C25 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 7612C26 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7589C27 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 7502C28 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 2000.0 PPM

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ANIMAL 7495D01 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((3)) HEMOSIDEROSIS

((2)) PERIVASCULAR FIBROSIS

ANIMAL 7539D02 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((3)) HEMOSIDEROSIS

ANIMAL 7519D03 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((4)) HEMOSIDEROSIS

ANIMAL 7515D04 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((4)) HEMOSIDEROSIS

VAGINA

MICRO: 3 VAGINITIS

ANIMAL 7568D05 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7636D06 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((4)) HEMOSIDEROSIS

VAGINA

MICRO: 1 VAGINITIS

ANIMAL 7545D07 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: (4) HEMOSIDEROSIS

(3) PERIVASCULAR FIBROSIS

ANIMAL 7575D08 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((3)) HEMOSIDEROSIS

((3)) PERIVASCULAR FIBROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page. Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 7584D09 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7610D10 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS

ANIMAL 7536D11 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((4)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS  
(3) EDEMA  
THE FOLLOWING TISSUES WERE MISSING:  
OVARIES

ANIMAL 7591D12 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO+ 4 PLASMACYTOSIS  
MICRO: 3 LYMPHOID HYPERPLASIA  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
(3) PERIVASCULAR FIBROSIS  
((2)) LUMINAL ECTASIA

ANIMAL 7554D13 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) HEMOSIDEROSIS

ANIMAL 7557D14 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: CRUST  
RIGHT AND LEFT, PERIOULAR AREA  
MICRO+ (1) HYPERKERATOSIS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
(2) PERIVASCULAR FIBROSIS

ANIMAL 7548D15 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (4) PERIVASCULAR FIBROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 7548D15 (CONTINUED)

(3) HEMOSIDEROSIS

VAGINA

MICRO: ((2)) MUCOSAL VACUOLATION

ANIMAL 7569D16 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN

GROSS:

SIZE INCREASE

2-3X NORMAL

MICRO: 4

PLASMACYTOSIS

MICRO: 3

LYMPHOID HYPERPLASIA

((3)) HISTIOCYTIC AGGREGATES

UTERUS

MICRO: ((3)) HEMOSIDEROSIS

((2)) PERIVASCULAR FIBROSIS

ANIMAL 7567D17 31-AUG-88 STUDY DAY 133  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((2)) LUMINAL ECTASIA

ANIMAL 7632D18 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((3)) HEMOSIDEROSIS

ANIMAL 7528D19 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: (3) HEMOSIDEROSIS

(2) PERIVASCULAR FIBROSIS

ANIMAL 7547D20 13-AUG-88 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

UTERUS

MICRO: (4) HEMOSIDEROSIS

VAGINA

MICRO: ((1)) VAGINITIS

KIDNEYS

GROSS:

HYDRONEPHROSIS

RIGHT, MARKED

MICRO: (3) HYDRONEPHROSIS

RIGHT

ANIMAL 7549D21 12-AUG-88 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

UTERUS

MICRO: ((2)) LUMINAL ECTASIA

(3) HEMOSIDEROSIS

(2) PERIVASCULAR FIBROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
FO ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 7583D22 16-AUG-88 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) LUMINAL ECTASIA  
(3) HEMOSIDEROSIS

ANIMAL 7523D23 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 7544D24 13-AUG-88 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
(3) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: ((1)) MUCOSAL VACUOLATION

ANIMAL 7637D25 14-AUG-88 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) HEMOSIDEROSIS  
VAGINA  
MICRO: 1 VAGINITIS  
((3)) MUCOSAL VACUOLATION

ANIMAL 7594D26 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) HEMOSIDEROSIS  
((2)) LUMINAL ECTASIA

ANIMAL 7596D27 12-AUG-88 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
(4) PERIVASCULAR FIBROSIS  
(2) HEMORRHAGE

ANIMAL 7510D28 15-AUG-88 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - F1 ADULT MALES

The following tissues were examined at necropsy and histologically for the high dose and control groups males, and for the remaining dose group males which had gross lesions of target organs (reproductive tract organs) with no significant lesions observed unless otherwise specified:

TOTAL BODY <sup>1</sup>	MESENTERY/OM'TUM <sup>2</sup>	PERITONEUM <sup>2</sup>	PERITONEAL CAV <sup>2</sup>	PLEURA <sup>2</sup>
THORACIC CAV <sup>2</sup>	HEART <sup>2</sup>	PERICARDIAL CAV <sup>2</sup>	AORTA <sup>2</sup>	SALIVARY GL <sup>2</sup>
ORAL/PHARYNGEAL <sup>2</sup>	TONGUE <sup>2</sup>	ESOPHAGUS <sup>2</sup>	STOMACH <sup>2</sup>	LIVER <sup>2</sup>
PANCREAS <sup>2</sup>	DUODENUM <sup>2</sup>	JEJUNUM <sup>2</sup>	ILEUM <sup>2</sup>	CECUM <sup>2</sup>
COLON <sup>2</sup>	RECTUM <sup>2</sup>	ANUS <sup>2</sup>	PITUITARY <sup>2</sup>	THYROID GL <sup>2</sup>
PARATHYROID GL <sup>2</sup>	ADRENAL GL <sup>2</sup>	SKIN <sup>2</sup>	SUBCUTIS <sup>2</sup>	HEAD <sup>2</sup>
EARS <sup>2</sup>	NARES/NOSE <sup>2</sup>	MAMMARY GL <sup>2</sup>	PAWS/FEET <sup>2</sup>	TAIL <sup>2</sup>
SPLEEN <sup>2</sup>	LYMPH ND, S-MAN <sup>2</sup>	LYMPH ND, MED <sup>2</sup>	LYMPH ND, MES <sup>2</sup>	THYMIC REGION <sup>2</sup>
BONE/JOINT <sup>2</sup>	BONE, STERNUM <sup>2</sup>	BONE, FEMUR <sup>2</sup>	BONE, VERTEBRA <sup>2</sup>	SKELETAL MUSCLE <sup>2</sup>
DIAPHRAGM <sup>2</sup>	BRAIN <sup>2</sup>	SPINAL CORD <sup>2</sup>	NERVE, SCIATIC <sup>2</sup>	EYE <sup>2</sup>
LACRYMAL GL <sup>2</sup>	TESTES <sup>2</sup>	EPIDIDYMIDES <sup>2</sup>	SEMINAL VESICLE	COAGULATING GL <sup>2</sup>
PROSTATE	PENIS <sup>2</sup>	LARYNX <sup>2</sup>	TRACHEA <sup>2</sup>	LUNGS <sup>2</sup>
KIDNEYS <sup>2</sup>	URETER <sup>2</sup>	URINARY BLADDER <sup>2</sup>	GROSS LESIONS	

<sup>1</sup> = Organ weights collected, <sup>2</sup> = examined at necropsy only, unless gross lesions present.  
<sup>2</sup> = examined microscopically for low and intermediate dose group males which failed to sire a litter.

Grade codes:

1=MINIMAL, 2=MILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCAL, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 0.0 PPM

ANIMAL 21338 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21339 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
SEMINAL VESICLE  
MICRO: (1) SEMINAL VESICULITIS

ANIMAL 21340 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

NARES/NOSE  
GROSS: CRUST  
RED, PERINASAL AREA  
PROSTATE  
MICRO: ((2)) PROSTATITIS

ANIMAL 21341 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((2)) PROSTATITIS

ANIMAL 21342 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

TESTES  
GROSS: SIZE DECREASE  
50% SMALLER THAN LEFT  
MICRO: 4 SEMINIFEROUS TUBULE ATROPHY  
UNILATERAL  
PROSTATE  
MICRO: ((4)) PROSTATITIS

ANIMAL 21343 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21344 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21345 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

TESTES  
GROSS: SIZE DECREASE  
1/2 OF NORMAL, LEFT  
MICRO: 4 SEMINIFEROUS TUBULE ATROPHY  
UNILATERAL

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 0.0 PPM

-----  
ANIMAL 21346 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21347 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21348 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

EYE  
GROSS: CRUST  
RED, RIGHT PERIOCLAR AREA  
PROSTATE  
MICRO: ((3)) PROSTATITIS

ANIMAL 21349 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
TESTES  
MICRO: ((2)) SEMINIFEROUS TUBULE ATROPHY  
UNILATERAL

ANIMAL 21350 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((1)) PROSTATITIS

ANIMAL 21351 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21352 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21353 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21354 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((2)) PROSTATITIS

ANIMAL 21355 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 0.0 PPM

ANIMAL 21356 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((1)) PROSTATITIS

ANIMAL 21357 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21358 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((1)) PROSTATITIS

ANIMAL 21359 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21360 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21361 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: (1) PROSTATITIS

ANIMAL 21362 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21363 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21364 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

TESTES  
GROSS: SIZE DECREASE  
50% OF NORMAL  
MICRO: 4 SEMINIFEROUS TUBULE ATROPHY  
BILATERAL

ANIMAL 21365 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 300.0 PPM

ANIMAL 21366 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21367 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

ORAL/PHARYNGEAL  
GROSS: MALOCCLUSION  
EYE  
GROSS: CRUST  
LEFT, PERIOULAR  
MICRO: NOT EXAMINED

ANIMAL 21368 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

NARES/NOSE  
GROSS: CRUST  
DARK RED  
TESTES  
MICRO: 3 SEMINIFEROUS TUBULE ATROPHY  
THE SEMINIFEROUS TUBULES ARE INTACT,  
BUT NO SPERM IS  
PRESENT.

ANIMAL 21369 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21370 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21371 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21372 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21373 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21374 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 300.0 PPM

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ANIMAL 21375 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21376 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21377 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
MILD, BILATERAL  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21378 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21379 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 21380 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21381 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

EYE  
GROSS: CRUST  
PERIOULAR, BILATERAL  
MICRO: NOT EXAMINED

ANIMAL 21382 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21383 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 300.0 PPM

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ANIMAL 21384 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21385 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21386 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21387 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21388 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21389 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21390 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND. S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21391 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21392 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21393 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 1000.0 PPM

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ANIMAL 21394 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21395 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO. MED  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21396 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21397 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21398 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

ORAL/PHARYNGEAL  
GROSS: MALOCCLUSION  
UPPER INCISORS  
EYE  
GROSS: CRUST  
RED, RIGHT PERIOCLAR AREA  
MICRO: NOT EXAMINED

ANIMAL 21399 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MODERATE  
MICRO: NOT EXAMINED

ANIMAL 21400 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21401 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21402 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 1000.0 PPM

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ANIMAL 21403 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21404 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO. S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 21405 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21406 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21407 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21408 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO. S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 21409 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21410 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21411 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21412 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 1000.0 PPM

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ANIMAL 21413 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21414 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21415 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21416 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21417 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21418 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21419 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO. S-MAN  
GROSS: SIZE INCREASE  
3X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 21420 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21421 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 2000.0 PPM

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ANIMAL 21422 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

PROSTATE  
MICRO: ((2)) PROSTATITIS  
KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, SLIGHT  
MICRO+ 3 HYDRONEPHROSIS  
MICRO: ((1)) NEPHRITIS, INTERSTITIAL  
((2)) TUBULAR BASOPHILIA  
(1) TUBULAR PROTEINOSIS

ANIMAL 21423 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
MICRO: (2) EPIDERMITIS  
PERIOCCULAR SKIN  
EYE  
GROSS: CRUST  
RED, PERIOCCULAR AREA, BILATERAL  
PROSTATE  
MICRO: (1) PROSTATITIS

ANIMAL 21424 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

EPIDIDYIMIDES  
GROSS: ABSCESS  
5X4X4MM, RIGHT EPIDIDYIMIS  
MICRO+ (4) SPERM GRANULOMA

ANIMAL 21425 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

EYE  
GROSS: CRUST  
RED, BILATERAL  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21426 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT LEGS, BILATERAL  
LYMPH NO. S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO+ 4 PLASMOCYTOSIS  
MICRO: 4 LYMPHOID HYPERPLASIA

ANIMAL 21427 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 2000.0 PPM

ANIMAL 21428 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((2)) PROSTATITIS

ANIMAL 21429 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21430 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

EYE  
GROSS: CRUST  
PERIOCLAR, RIGHT  
TESTES  
GROSS: SIZE INCREASE  
RIGHT, 2X NORMAL  
MICRO: 5 SEMINIFEROUS TUBULE ATROPHY  
UNILATERAL

ANIMAL 21431 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21432 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21433 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: 4 PLASMACYTOSIS  
MICRO: 3 LYMPHOID HYPERPLASIA  
((2)) HISTIOCYTIC AGGREGATES

ANIMAL 21434 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21435 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21436 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 2000.0 PPM

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ANIMAL 21437 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21438 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: (2) PROSTATITIS

ANIMAL 21439 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21440 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO+ 4 LYMPHOID HYPERPLASIA

ANIMAL 21441 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
MODERATE, BILATERAL  
MICRO+ 2 HYDRONEPHROSIS  
MICRO: ((3)) TUBULAR BASOPHILIA  
((3)) NEPHRITIS, INTERSTITIAL

ANIMAL 21442 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21443 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21444 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21445 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 2000.0 PPM

ANIMAL 21446 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

ORAL/PHARYNGEAL  
GROSS: MALOCCLUSION  
EYE  
GROSS: CRUST  
RIGHT, PERIOCLAR  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21447 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21448 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
PROSTATE  
MICRO: ((2)) PROSTATITIS

ANIMAL 21449 3-NOV-88 STUDY DAY 50

TYPE OF DEATH: SACRIFICED MORIBUND

ORAL/PHARYNGEAL  
GROSS: MALOCCLUSION  
STOMACH  
GROSS: COLOR CHANGE, FOCAL/MULTIFOCA  
BLACK FOCI, GLANDULAR AND NON-GLANDULAR  
REGIONS  
JEJUNUM  
GROSS: CONTENTS ABNORMAL  
BLACK FLUID  
ILEUM  
GROSS: CONTENTS ABNORMAL  
BLACK FLUID  
CECUM  
GROSS: CONTENTS ABNORMAL  
BLACK FLUID  
CECUM  
GROSS: DILATATION/DISTENTION  
2X NORMAL  
ADRENAL GL  
GROSS: COLOR CHANGE, DIFFUSE  
DARK RED, BILATERAL  
MICRO+ 4 CONGESTION  
SKIN  
GROSS: STAINED  
URINE, UROGENITAL REGION  
SPLEEN  
GROSS: SIZE DECREASE  
1/4 OF NORMAL  
MICRO+ P CONTRACTED SPLEEN  
MICRO: 3 LYMPHOID DEPLETION  
EYE  
GROSS: DISCHARGE

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULTS MALES

GROUP: 2000.0 PPM

ANIMAL 21449 (CONTINUED)

SEMINAL VESICLE  
GROSS: RED, BILATERAL  
SIZE DECREASE  
1/2 OF NORMAL, BILATERAL

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - F1 ADULT FEMALES

The following tissues were examined at necropsy and histologically for the high dose and control group females and for rats from the remaining groups which died on study or which had gross lesions of target organs (reproductive tract organs) with no significant lesions observed unless otherwise specified:

TOTAL BODY <sup>1</sup>	MESENTERY/OM'TUM <sup>1</sup>	PERITONEUM <sup>1</sup>	PERITONEAL CAV <sup>1</sup>	PLEURA <sup>2</sup>
THORACIC CAV <sup>2</sup>	HEART <sup>2</sup>	PERICARDIAL CAV <sup>2</sup>	AORTA <sup>2</sup>	SALIVARY GL <sup>2</sup>
ORAL/PHARYNGEAL <sup>2</sup>	TONGUE <sup>2</sup>	ESOPHAGUS <sup>2</sup>	STOMACH <sup>2</sup>	LIVER <sup>2</sup>
PANCREAS <sup>2</sup>	DUODENUM <sup>2</sup>	JEJUNUM <sup>2</sup>	ILEUM <sup>2</sup>	CECUM <sup>2</sup>
COLON <sup>2</sup>	RECTUM <sup>2</sup>	ANUS <sup>2</sup>	PITUITARY <sup>2</sup>	THYROID GL <sup>2</sup>
PARATHYROID GL <sup>2</sup>	ADRENAL GL <sup>2</sup>	SKIN <sup>2</sup>	SUBCUTIS <sup>2</sup>	HEAD <sup>2</sup>
EARS <sup>2</sup>	NARES/NOSE <sup>2</sup>	MAMMARY GL <sup>2</sup>	PAWS/FEET <sup>2</sup>	TAIL <sup>2</sup>
SPLEEN <sup>2</sup>	LYMPH ND, S-MAN <sup>2</sup>	LYMPH ND, MED <sup>2</sup>	LYMPH ND, MES <sup>2</sup>	THYMIC REGION <sup>2</sup>
BONE/JOINT <sup>2</sup>	BONE, STERNUM <sup>2</sup>	BONE, FEMUR <sup>2</sup>	BONE, VERTEBRA <sup>2</sup>	SKELETAL MUSCLE <sup>2</sup>
DIAPHRAGM <sup>2</sup>	BRAIN <sup>2</sup>	SPINAL CORD <sup>2</sup>	NERVE, SCIATIC <sup>2</sup>	EYE <sup>2</sup>
LACRYMAL GL <sup>2</sup>	OVARIES	OVIDUCT <sup>2</sup>	UTERUS	CERVIX <sup>2</sup>
VAGINA	VULVA <sup>2</sup>	LARYNX <sup>2</sup>	TRACHEA <sup>2</sup>	LUNGS <sup>2</sup>
KIDNEYS <sup>2</sup>	URETER <sup>2</sup>	URINARY BLADDER <sup>2</sup>	GROSS LESIONS	

<sup>1</sup> = Organ weights collected, <sup>2</sup> = examined at necropsy only, unless gross lesions present.

Grade codes:

1=MINIMAL, 2=MILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCAL, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 0.0 PPM

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ANIMAL 21450 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((4)) HEMOSIDEROSIS

ANIMAL 21451 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21452 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS

ANIMAL 21453 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
(2) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: 2 VAGINITIS

ANIMAL 21454 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
VAGINA  
MICRO: 2 VAGINITIS

ANIMAL 21455 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
ALMOST ENTIRE VENTRAL SURFACE  
MICRO: (1) EPIDERMITIS  
1 HYPERKERATOSIS  
UTERUS  
MICRO: ((2)) HEMOSIDEROSIS

ANIMAL 21456 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS

ANIMAL 21457 6-SEP-88 STUDY DAY -8

TYPE OF DEATH: FOUND DEAD

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 0.0 PPM

ANIMAL 21458 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT LEGS, BILATERAL  
VAGINA  
MICRO: 3 VAGINITIS

ANIMAL 21459 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
OVARIES  
MICRO: (P) CYST(S), OVARIAN BURSA(E)  
VAGINA  
MICRO: ((1)) VAGINITIS  
KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MILD  
MICRO: 3 HYDRONEPHROSIS  
RIGHT

ANIMAL 21460 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

STOMACH  
GROSS: CONTENTS ABNORMAL  
YELLOW MUCOUS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
VAGINA  
MICRO: ((1)) VAGINITIS

ANIMAL 21461 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21462 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
VAGINA  
MICRO: 2 VAGINITIS

ANIMAL 21463 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: 5 PLASMACYTOSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 0.0 PPM

ANIMAL 21463 (CONTINUED)MICRO: ((3)) HISTIOCYTIC AGGREGATES  
UTERUS  
MICRO: (3) HEMOSIDEROSISANIMAL 21464 21-JAN-89 STUDY DAY 129

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSISANIMAL 21465 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONSANIMAL 21466 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
OVARIES  
MICRO: (P) CYST(S), OVARIAN BURSA(E)ANIMAL 21467 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONSANIMAL 21468 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSISANIMAL 21469 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
(2) PERIVASCULAR FIBROSISANIMAL 21470 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((2)) LUMINAL ECTASIAANIMAL 21471 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: ((1)) VAGINITIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page. Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 0.0 PPH

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ANIMAL 21472 16-JAN-89 STUDY DAY 124  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) LUMINAL ECTASIA  
(2) PERIVASCULAR FIBROSIS

ANIMAL 21473 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: 1 VAGINITIS

ANIMAL 21474 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((4)) HEMOSIDEROSIS  
((2)) PERIVASCULAR FIBROSIS

ANIMAL 21475 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSIS

ANIMAL 21476 6-JAN-89 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (4) HEMOSIDEROSIS

ANIMAL 21477 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
(3) PERIVASCULAR FIBROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 300.0 PPM

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ANIMAL 21478 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21479 21-JAN-89 STUDY DAY 129

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21480 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21481 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

OVARIES  
GROSS: CYST  
3X3MM, CLEAR FLUID FILLED, RIGHT  
MICRO+ (P) CYST(S), OVARIAN BURSA(E)  
UTERUS  
MICRO: (3) HEMOSIDEROSIS

ANIMAL 21482 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21483 24-JAN-89 STUDY DAY 132

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21484 25-JAN-89 STUDY DAY 133

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21485 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21486 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21487 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 300.0 PPM

ANIMAL 21488 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 21489 13-SEP-88 STUDY DAY -1

TYPE OF DEATH: FOUND DEAD

ADIPOSE TISSUE  
MICRO: 5 #M LYMPHOSARCOMA  
INVOLVES MEDIASTINAL BROWN FAT AROUND  
THYMIC REGION.  
LIVER  
GROSS: SIZE INCREASE  
3X NORMAL  
MICRO: 5 #M LYMPHOSARCOMA  
DIFFUSE  
SPLEEN  
GROSS: SIZE INCREASE  
50X15X10MM  
MICRO: 5 #M LYMPHOSARCOMA  
DIFFUSE  
LYMPH ND, MED  
GROSS: COLOR CHANGE, DIFFUSE  
RED  
MICRO: 4 SINUS ERYTHROCYTOSIS  
LUNGS  
GROSS: COLOR CHANGE, FOCAL/MULTIFOCAL  
ALL LOBES PALE PINK AND DARK RED  
MICRO: ((3)) HEMORRHAGE  
MICRO: ((2)) PNEUMONITIS, INTERSTITIAL

ANIMAL 21490 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21491 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ALOPECIA  
FRONT LEGS, BILATERAL  
MICRO: NOT EXAMINED

ANIMAL 21492 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21493 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 300.0 PPM

ANIMAL 21494 18-JAN-89 STUDY DAY 126

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21495 25-JAN-89 STUDY DAY 133

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21496 14-JAN-89 STUDY DAY 122

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21497 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21498 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21499 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

EARS  
GROSS: COLOR CHANGE, DIFFUSE  
RED, BILATERAL  
EARS  
GROSS: THICKER THAN NORMAL  
BILATERAL  
MICRO: NOT EXAMINED

ANIMAL 21500 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH NO. MED  
GROSS: COLOR CHANGE, DIFFUSE  
DARK RED  
LYMPH NO. MED  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO: NOT EXAMINED

ANIMAL 21501 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

PAWS/FEET  
GROSS: ALOPECIA  
ALL PAWS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 300.0 PPM

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ANIMAL 21502 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21503 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21504 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21505 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 1000.0 PPM

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ANIMAL 21506 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21507 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21508 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
SEVERE, RIGHT  
KIDNEYS  
GROSS: SIZE INCREASE  
2X NORMAL, RIGHT  
MICRO: NOT EXAMINED

ANIMAL 21509 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21510 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21511 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21512 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21513 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21514 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21515 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 1000.0 PPM

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ANIMAL 21516 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21517 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21518 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21519 24-JAN-89 STUDY DAY 132

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21520 16-JAN-89 STUDY DAY 124

TYPE OF DEATH: SCHEDULED SACRIFICE

EYE  
GROSS: CRUST  
RED, BILATERAL  
MICRO: NOT EXAMINED

ANIMAL 21521 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21522 19-JAN-89 STUDY DAY 127

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21523 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21524 19-JAN-89 STUDY DAY 127

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21525 10-JAN-89 STUDY DAY 118

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21526 24-JAN-89 STUDY DAY 132

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 1000.0 PPM

ANIMAL 21526 (CONTINUED)

GROSS: HYDRONEPHROSIS  
MARKED, BILATERAL  
MICRO: NOT EXAMINED

ANIMAL 21527 25-JAN-89 STUDY DAY 133

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21528 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21529 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

ORAL/PHARYNGEAL  
GROSS: MALOCCLUSION  
UPPER INCISORS  
MICRO: NOT EXAMINED

ANIMAL 21530 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

STOMACH  
GROSS: CONTENTS ABNORMAL  
YELLOW MUCOUS  
MICRO: NOT EXAMINED

ANIMAL 21531 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

URINARY BLADDER  
GROSS: CONTENTS ABNORMAL  
CONTAINS LIGHT RED FLUID  
MICRO: NOT EXAMINED

ANIMAL 21532 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 21533 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 2000.0 PPM

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ANIMAL 21534 6-JAN-89 STUDY DAY 114  
TYPE OF DEATH: SCHEDULED SACRIFICE

EYE  
GROSS: CRUST  
RED, RIGHT PERIOcular AREA  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: 2 VAGINITIS

ANIMAL 21535 9-JAN-89 STUDY DAY 117  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) LUMINAL ECTASIA

ANIMAL 21536 10-JAN-89 STUDY DAY 118  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((4)) HEMOSIDEROSIS  
((2)) PERIVASCULAR FIBROSIS

ANIMAL 21537 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

LYMPH ND, S-MAN  
GROSS: SIZE INCREASE  
2X NORMAL  
MICRO+ 4 PLASMACYTOSIS  
MICRO: 2 LYMPHOID HYPERPLASIA  
((2)) HISTIOCYTIC AGGREGATES  
UTERUS  
MICRO: ((4)) HEMOSIDEROSIS  
((2)) PERIVASCULAR FIBROSIS

ANIMAL 21538 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS

ANIMAL 21539 25-JAN-89 STUDY DAY 133  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21540 7-JAN-89 STUDY DAY 115  
TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (4) HEMOSIDEROSIS  
VAGINA

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DANLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 21540 (CONTINUED)

MICRO: 2 VAGINITIS

ANIMAL 21541 11-JAN-89 STUDY DAY 119

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUSMICRO: ((3)) HEMOSIDEROSIS  
((2)) PERIVASCULAR FIBROSIS

VAGINA

MICRO: ((2)) VACUOLATED MUCOSA

ANIMAL 21542 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUSMICRO: ((3)) HEMOSIDEROSIS  
(2) PERIVASCULAR FIBROSIS

VAGINA

MICRO: ((1)) VACUOLATED MUCOSA

ANIMAL 21543 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS

MICRO: ((3)) HEMOSIDEROSIS

VAGINA

MICRO: ((3)) VAGINITIS

ANIMAL 21544 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN

GROSS: ALOPECIA  
ALMOST ENTIRE VENTRAL SURFACE

OVARIES

MICRO: (P) CYST(S), OVARIAN BURSA(E)

UTERUS

MICRO: (3) PERIVASCULAR FIBROSIS

ANIMAL 21545 25-JAN-89 STUDY DAY 133

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONSANIMAL 21546 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS

MICRO: ((2)) LUMINAL ECTASIA

VAGINA

MICRO: ((2)) VACUOLATED MUCOSA

ANIMAL 21547 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

UTERUS

MICRO: ((3)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS

KIDNEYS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page. Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 21547 (CONTINUED)

GROSS: HYDRONEPHROSIS  
RIGHT, SLIGHT  
MICRO: 3 HYDRONEPHROSIS

ANIMAL 21548 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
((4)) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: (2) VACUOLATED MUCOSA

ANIMAL 21549 12-JAN-89 STUDY DAY 120

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (2) HEMOSIDEROSIS  
(1) PERIVASCULAR FIBROSIS

ANIMAL 21550 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS

ANIMAL 21551 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21552 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS

ANIMAL 21553 6-JAN-89 STUDY DAY 114

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) LUMINAL ECTASIA  
(3) HEMOSIDEROSIS  
((3)) PERIVASCULAR FIBROSIS  
VAGINA  
MICRO: ((1)) VACUOLATED MUCOSA

ANIMAL 21554 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((2)) HEMOSIDEROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page. Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 21555 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: EXAMINED - NO SIGNIFICANT LESIONS

ANIMAL 21556 9-JAN-89 STUDY DAY 117

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: ((3)) HEMOSIDEROSIS  
(2) PERIVASCULAR FIBROSIS

ANIMAL 21557 7-JAN-89 STUDY DAY 115

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
VAGINA  
MICRO: ((2)) VAGINITIS

ANIMAL 21558 18-JAN-89 STUDY DAY 126

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
UTERUS  
MICRO: (4) HEMOSIDEROSIS  
VAGINA  
MICRO: ((2)) VAGINITIS

ANIMAL 21559 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN  
GROSS: ULCERATED  
10X10 AREA, UNDER RIGHT FRONT LEG  
MICRO+ (4) ULCERATION  
MICRO: 5 DERMATITIS  
PYOGRANULOMATOUS  
5 DERMAL FIBROSIS  
PAWS/FEET  
GROSS: SWOLLEN  
REAR, BILATERAL  
MICRO+((4)) OSTEOARTHRITIS  
MULTIPLE JOINTS OF REAR FEET AFFECTED  
UTERUS  
MICRO: (3) HEMOSIDEROSIS  
VAGINA  
MICRO: ((1)) VAGINITIS

ANIMAL 21560 5-JAN-89 STUDY DAY 113

TYPE OF DEATH: SCHEDULED SACRIFICE

OVARIES  
MICRO: (P) CYST(S), OVARIAN BURSA(E)  
KIDNEYS  
GROSS: HYDRONEPHROSIS  
LEFT, MARKED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 ADULT FEMALES

GROUP: 2000.0 PPM

ANIMAL 21560 (CONTINUED)

MICRO+ 3 HYDRONEPHROSIS  
MICRO: ((1)) NEPHRITIS, INTERSTITIAL  
((3)) TUBULAR BASOPHILIA  
((2)) FIBROSIS, INTERSTITIAL

ANIMAL 21561 8-JAN-89 STUDY DAY 116

TYPE OF DEATH: SCHEDULED SACRIFICE

SKIN

MICRO: (1) HYPERKERATOSIS  
PERIOCLAR SKIN

MAHMARY GL

MICRO: 4 HYPERPLASIA

LYMPH ND, S-MAN

GROSS: SIZE INCREASE  
2X NORMAL

MICRO+ 3 PLASHACYTOSIS

MICRO: 5 LYMPHOID DEPLETION

EYE

GROSS: CRUST  
RED, RIGHT PERIOCLAR AREA

UTERUS

MICRO: ((4)) HEMOSIDEROSIS  
(3) PERIVASCULAR FIBROSIS

VAGINA

MICRO: 1 VAGINITIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - F1 WEANLING MALES

The following tissues were examined at necropsy with no significant lesions observed unless otherwise specified:

TOTAL BODY	MESENTERY/OM'TUM	PERITONEUM	PERITONEAL CAV	PLEURA
THORACIC CAV	HEART	PERICARDIAL CAV	AORTA	SALIVARY GL
ORAL/PHARYNGEAL	TONGUE	ESOPHAGUS	STOMACH	LIVER
PANCREAS	DUODENUM	JEJUNUM	ILEUM	CECUM
COLON	RECTUM	ANUS	PITUITARY	THYROID GL
PARATHYROID GL	ADRENAL GL	SKIN	SUBCUTIS	HEAD
EARS	NARES/NOSE	MAMMARY GL	PAWS/FEET	TAIL
SPLEEN	LYMPH ND, S-MAN	LYMPH ND, MED	LYMPH ND, MES	THYMIC REGION
BONE/JOINT	BONE, STERNUM	BONE, FEMUR	BONE, VERTEBRA	SKELETAL MUSCLE
DIAPHRAGM	BRAIN	SPINAL CORD	NERVE, SCIATIC	EYE
LACRYMAL GL	TESTES	EPIDIDYMIDES	SEMINAL VESICLE	COAGULATING GL
PROSTATE	PENIS	LARYNX	TRACHEA	LUNGS
KIDNEYS	URETER	URINARY BLADDER		

' = Organ weights collected.

Grade codes:

1=MINIMAL, 2=MILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCA, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING MALES

GROUP: 0.0 PPM

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ANIMAL 21562 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21563 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21564 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21565 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21566 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21567 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21568 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MILD  
MICRO: NOT EXAMINED

ANIMAL 21569 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORM  
MICRO: NOT EXAMINED

ANIMAL 21570 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING MALES

GROUP: 0.0 PPM

-----  
ANIMAL 21571 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING MALES

GROUP: 300.0 PPM

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ANIMAL 21572 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21573 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21574 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PIN WORMS  
MICRO: NOT EXAMINED

ANIMAL 21575 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21576 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21577 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21578 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21579 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21580 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21581 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING MALES

GROUP: 1000.0 PPM

---

ANIMAL 21582 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21583 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21584 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21585 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21586 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21587 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

PAWS/FEET  
GROSS: ERROR IN TOE CLIPPING  
BX  
MICRO: N O T E X A M I N E D

ANIMAL 21588 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21589 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: N O T E X A M I N E D

ANIMAL 21590 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

ANIMAL 21591 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: N O T E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING MALES

GROUP: 2000.0 PPM

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ANIMAL 21592 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21593 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21594 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21595 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21596 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21597 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21598 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21599 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21600 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21601 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MILD  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
PATHOLOGY PROTOCOL - F1 WEANLING FEMALES

The following tissues were examined at necropsy with no significant lesions observed unless otherwise specified:

TOTAL BODY	MESENTERY/OM'TUM	PERITONEUM	PERITONEAL CAV	PLEURA
THORACIC CAV	HEART	PERICARDIAL CAV	AORTA	SALIVARY GL
ORAL/PHARYNGEAL	TONGUE	ESOPHAGUS	STOMACH	LIVER
PANCREAS	DUODENUM	JEJUNUM	ILEUM	CECUM
COLON	RECTUM	ANUS	PITUITARY	THYROID GL
PARATHYROID GL	ADRENAL GL	SKIN	SUBCUTIS	HEAD
EARS	NARES/NOSE	MAMMARY GL	PAWS/FEET	TAIL
SPLEEN	LYMPH ND, S-MAN	LYMPH ND, MED	LYMPH ND, MES	THYMIC REGION
BONE/JOINT	BONE, STERNUM	BONE, FEMUR	BONE, VERTEBRA	SKELETAL MUSCLE
DIAPHRAGM	BRAIN	SPINAL CORD	NERVE, SCIATIC	EYE
LACRYMAL GL	OVARIES	OVIDUCT	UTERUS	CERVIX
VAGINA	VULVA	LARYNX	TRACHEA	LUNGS
KIDNEYS	URETER	URINARY BLADDER		

' = Organ weights collected.

Grade codes:

1=MINIMAL, 2=MILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCAL, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING FEMALES

GROUP: 0.0 PPM

---

ANIMAL 21602 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21603 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21604 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21605 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21606 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21607 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21608 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21609 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21610 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21611 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING FEMALES

GROUP: 300.0 PPM

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ANIMAL 21612 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21613 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21614 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21615 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21616 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

ANIMAL 21617 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21618 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21619 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21620 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21621 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING FEMALES

GROUP: 1000.0 PPM

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ANIMAL 21622 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21623 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEKIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MODERATE  
MICRO: NOT EXAMINEDANIMAL 21624 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21625 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21626 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21627 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21628 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21629 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21630 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICEGROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINEDANIMAL 21631 26-AUG-88 STUDY DAY 35  
TYPE OF DEATH: SCHEDULED SACRIFICECOLON  
GROSS: PARASITE  
PINWORMS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F1 WEANLING FEMALES

GROUP: 2000.0 PPM

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ANIMAL 21632 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21633 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21634 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21635 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21636 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21637 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21638 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21639 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21640 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 21641 26-AUG-88 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - F2 WEANLING MALES

The following tissues were examined at necropsy with no significant lesions observed unless otherwise specified:

TOTAL BODY	MESENTERY/OM'TUM	PERITONEUM	PERITONEAL CAV	PLEURA
THORACIC CAV	HEART	PERICARDIAL CAV	AORTA	SALIVARY GL
ORAL/PHARYNGEAL	TONGUE	ESOPHAGUS	STOMACH	LIVER
PANCREAS	DUODENUM	JEJUNUM	ILEUM	CECUM
COLON	RECTUM	ANUS	PITUITARY	THYROID GL
PARATHYROID GL	ADRENAL GL	SKIN	SUBCUTIS	HEAD
EARS	NARES/NOSE	MAMMARY GL	PAWS/FEET	TAIL
SPLEEN	LYMPH ND, S-MAN	LYMPH ND, MED	LYMPH ND, MES	THYMIC REGION
BONE/JOINT	BONE, STERNUM	BONE, FEMUR	BONE, VERTEBRA	SKELETAL MUSCLE
DIAPHRAGM	BRAIN	SPINAL CORD	NERVE, SCIATIC	EYE
LACRYMAL GL	TESTES	EPIDIDYIDES	SEMINAL VESICLE	COAGULATING GL
PROSTATE	PENIS	LARYNX	TRACHEA	LUNGS
KIDNEYS	URETER	URINARY BLADDER		

' = Organ weights collected.

Grade codes:

1=MINIMAL, 2=WILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCA, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING MALES

GROUP: 0.0 PPM

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ANIMAL 1232 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1233 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1234 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1235 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1236 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1237 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1238 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
SEVERE, RIGHT  
MICRO: NOT EXAMINED

ANIMAL 1239 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1240 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
MODERATE, RIGHT  
MICRO: NOT EXAMINED

ANIMAL 1241 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING MALES

GROUP: 300.0 PPM

---

ANIMAL 1242 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1243 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1244 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
SEVERE, RIGHT  
MICRO: NOT EXAMINED

ANIMAL 1245 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1246 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1247 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON  
GROSS: PARASITE  
PIN WORMS  
MICRO: NOT EXAMINED

ANIMAL 1248 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1249 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1250 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1251 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING MALES

GROUP: 300.0 PPM

ANIMAL 1251 (CONTINUED)

MICRO: N O T      SEVERE, RIGHT  
E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING MALES

GROUP: 1000.0 PPM

---

ANIMAL 1252 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1253 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1254 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1255 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1256 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1257 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1258 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MILD  
MICRO: NOT EXAMINED

ANIMAL 1259 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1260 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
SEVERE, RIGHT  
MICRO: NOT EXAMINED

ANIMAL 1261 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING MALES

GROUP: 2000.0 PPM

---

ANIMAL 1262 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

COLON

GROSS:

PARASITE

PINWORMS

MICRO: NOT EXAMINED

ANIMAL 1263 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1264 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1265 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1266 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1267 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1268 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1269 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1270 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

ANIMAL 1271 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page. Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

PATHOLOGY PROTOCOL - F2 WEANLING FEMALES

The following tissues were examined at necropsy with no significant lesions observed unless otherwise specified:

TOTAL BODY	MESENTERY/OM'TUM	PERITONEUM	PERITONEAL CAV	PLEURA
THORACIC CAV	HEART	PERICARDIAL CAV	AORTA	SALIVARY GL
ORAL/PHARYNGEAL	TONGUE	ESOPHAGUS	STOMACH	LIVER
PANCREAS	DUODENUM	JEJUNUM	ILEUM	CECUM
COLON	RECTUM	ANUS	PITUITARY	THYROID GL
PARATHYROID GL	ADRENAL GL	SKIN	SUBCUTIS	HEAD
EARS	NARES/NOSE	MAMMARY GL	PAWS/FEET	TAIL
SPLEEN	LYMPH ND, S-MAN	LYMPH ND, MED	LYMPH ND, MES	THYMIC REGION
BONE/JOINT	BONE, STERNUM	BONE, FEMUR	BONE, VERTEBRA	SKELETAL MUSCLE
DIAPHRAGM	BRAIN	SPINAL CORD	NERVE, SCIATIC	EYE
LACRYMAL GL	OVARIES	OVIDUCT	UTERUS	CERVIX
VAGINA	VULVA	LARYNX	TRACHEA	LUNGS
KIDNEYS	URETER	URINARY BLADDER		

1 = Organ weights collected.

Grade codes:

1=MINIMAL, 2=MILD, 3=MODERATE, 4=MARKED, 5=SEVERE, P=PRESENT  
( )=FOCAL, (( ))=MULTIFOCAL, NO PARENTHESES=DIFFUSE

Micro diagnosis prefix codes:

# = NEOPLASM, B = BENIGN, M = MALIGNANT, @PN = PRE-NEOPLASTIC

MICRO+ indicates histologic confirmation of preceding gross diagnosis.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES,

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING FEMALES

GROUP: 0.0 PPM

---

ANIMAL 1272 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1273 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1274 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1275 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1276 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1277 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

STOMACH  
GROSS: CONTENTS ABNORMAL  
CLEAR LIQUID  
MICRO: NOT EXAMINED

ANIMAL 1278 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1279 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1280 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1281 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 MEANLING FEMALES

GROUP: 300.0 PPM

---

ANIMAL 1282 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1283 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1284 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1285 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1286 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
LEFT, MILD  
MICRO: NOT EXAMINED

ANIMAL 1287 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1288 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1289 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1290 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1291 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING FEMALES

GROUP: 1000.0 PPM

---

ANIMAL 1292 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1293 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1294 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1295 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1296 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1297 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
BILATERAL, MILD  
MICRO: NOT EXAMINED

ANIMAL 1298 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, SLIGHT  
MICRO: NOT EXAMINED

ANIMAL 1299 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1300 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1301 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

## INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING FEMALES

GROUP: 2000.0 PPM

---

ANIMAL 1302 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1303 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1304 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

EARS  
GROSS: SWOLLEN  
RIGHT EAR  
MICRO: NOT EXAMINED

ANIMAL 1305 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
MODERATE, LEFT; MARKED RIGHT  
MICRO: NOT EXAMINED

ANIMAL 1306 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1307 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1308 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

ANIMAL 1309 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

KIDNEYS  
GROSS: HYDRONEPHROSIS  
RIGHT, MILD  
MICRO: NOT EXAMINED

ANIMAL 1310 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS  
MICRO: NOT EXAMINED

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL NECROPSY OBSERVATIONS AND/OR MICROSCOPIC DIAGNOSES

DATA FOR ALL ANIMALS ON STUDY  
F2 WEANLING FEMALES

GROUP: 2000.0 PPM

-----  
ANIMAL 1311 1-FEB-89 STUDY DAY 35

TYPE OF DEATH: SCHEDULED SACRIFICE

GROSS: EXAMINED - NO SIGNIFICANT LESIONS

MICRO: N O T E X A M I N E D

A list of tissues examined grossly and microscopically is presented on the pathology protocol page.  
Only those organs with gross or microscopic findings are listed on this page.

APPENDIX 3Individual Animal Data: In-Life  
(94 Pages)

	<u>Pages</u>
3A F0 Generation Adults. . . . .	1-43
3B F1 Generation Adults. . . . .	44-94

## Clinical Observation Abbreviations:

AXB = axillary-both, BDY = body, EAR = ear, EYB = eye-both,  
 EYL = eye-left, EYR = eye-right, FAC = face, HPB = hip-both,  
 LAL = Legs-all, LFB = Leg-front-both, LFL = Leg-front-left,  
 LFR = Leg-front-right, LHB = Leg-hind-both, MUL = multiple,  
 MTH = mouth, NSE = nose, PFB = Paw-fore-both, PFL = Paw-fore-left,  
 PFR = Paw-fore-right, SHR = shoulder-right, SDR = Side-right,  
 TAL = tail

## Body weights:

The data listed as negative intervals on the body weight tables for the F0 and F1 male and female rats are the preliminary weights collected at three, two and one week prior to the scheduled start of the prebreed period. The animals were exposed to the dosed feed at these time periods.

## Food Consumption Abbreviations:

r/s = Value removed due to observed spillage.  
 r/e = Value removed due to excreta in feeder.  
 r/dead = Value removed due to death/sacrifice in a moribund condition  
 r/a = Value removed due to addition of an unmeasured quantity of  
 additional food.  
 r/o = Value removed for reason specified in raw data.

The 'r' in interval 13 (last week of mating), designates the initial feeder weight collected for the calculation of the food consumption value for for the next interval.

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
0.0 PPM					
	7387A01	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7483A02	NORMAL	116	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	4	27- 30	PERIOULAR ENCRUSTATION (EYL 4)
			2	28- 29	PERINASAL ENCRUSTATION
	7383A03	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7458A04	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	45	PERINASAL ENCRUSTATION
	7450A05	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7335A06	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7418A07	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		BODY	1	49	UROGENITAL DISCHARGE, RED
	7417A08	NORMAL	117	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	6	PALE EYES (EYR 1)
	7482A09	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7345A10	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7367A11	NORMAL	89	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	20	54- 81	PERIOULAR ENCRUSTATION (EYB 1, EYR 19)
		ORAL/DENTAL	29	54- 82	MALOCCLUSION
			2	54- 55	ORAL LESION
	7444A12	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7384A13	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7455A14	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		SKIN	1	32	ALOPECIA (PFB 1)
	7378A15	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7342A16	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7461A17	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
0.0 PPM	7484A18	NORMAL	117	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		BODY	2	44- 45	SWELLING (NSE 2)
	7401A19	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7395A20	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7475A21	NORMAL	117	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	61	PERINASAL ENCRUSTATION
	7389A22	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7341A23	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7464A24	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7358A25	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7480A26	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7459A27	NORMAL	115	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	3	60- 62	ALOPECIA (PFR 3)
	7336A28	NORMAL	62	0- 61	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		SKIN	14	105-118	PAPILLOMA-UPPER LEFT LIP
			44	61-104	NODULE-LEFT UPPER LIP
300.0 PPM	7447B01	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7425B02	NORMAL	45	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		BODY	1	55	UROGENITAL DISCHARGE, RED
			6	48- 54	DEHYDRATED
		EYES/EARS/NOSE	67	43-117	PERIOULAR ENCRUSTATION (EVB 2, EYL 65)
			2	63- 78	REDDENED EYES (EYL 2)
			2	71- 77	OCULAR DISCHARGE (EYL 2)
			6	43- 48	PERINASAL ENCRUSTATION
			1	43	NASAL DISCHARGE
	7421B03	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7339B04	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
300.0 PPM	7467B05	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7424B06	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7446B07	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7481B08	NORMAL	113	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	EYES/EARS/NOSE		6	49- 57	PERIOULAR ENCRUSTATION (EYB 6)
			1	49	PERINASAL ENCRUSTATION
	7393B09	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7373B10	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	7414B11	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	7416B12	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7430B13	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7347B14	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	7449B15	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7371B16	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	7356B17	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7477B18	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	7354B19	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	117	SCHEDULED SACRIFICE
	7405B20	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	EYES/EARS/NOSE		1	20	PERINASAL ENCRUSTATION
	7366B21	NORMAL	113	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	EYES/EARS/NOSE		5	28- 32	PERIOULAR ENCRUSTATION (EYB 4, EYR 1)
	EXCRETA		1	118	LOOSE FECES
	7396B22	NORMAL	42	0- 48	NO SIGNIFICANT CLINICAL OBSERVATIONS
	DEAD		1	118	SCHEDULED SACRIFICE
	BODY		4	54- 57	SWELLING (NSE 4)
	EYES/EARS/NOSE		74	8-118	PERIOULAR ENCRUSTATION (EYB 68, EYL 5, EYR 1)



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
300.0 PPM	7396B22	EYES/EARS/NOSE	9	13- 78	OCULAR DISCHARGE (EYB 6, EYL 2, EYR 1)
			9	69- 76	REDDENED EYES (EYB 7, EYL 1, EYR 1)
			1	54	NASAL DISCHARGE, RED
	7468B23	ORAL/DENTAL	1	77	OVERGROWN INCISORS
			118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
	7453B24	NORMAL	116	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
			1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	3	6- 8	PERIOULAR ENCRUSTATION (EYR 3)
			2	6- 7	PERINASAL ENCRUSTATION
			2	3- 4	OCULAR DISCHARGE (EYR 2)
	7402B25	NORMAL	97	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
			25	41-109	PERIOULAR ENCRUSTATION (EYR 25)
	7388B26	EYES/EARS/NOSE	1	54	PERINASAL ENCRUSTATION
			119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
	7473B27	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
			1	118	SCHEDULED SACRIFICE
	7462B28	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
			1	76	PERINASAL ENCRUSTATION
		EYES/EARS/NOSE	2	55- 56	PERIOULAR ENCRUSTATION (EYR 2)
1000.0 PPM	7346C01	NORMAL	108	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
			6	89- 93	PERIOULAR ENCRUSTATION (EYB 3, EYR 3)
		EYES/EARS/NOSE	1	89	PERINASAL ENCRUSTATION
			10	89- 98	MALOCCLUSION
			116	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	7340C02	NORMAL	1	118	SCHEDULED SACRIFICE
			1	45	CRUST (LFR 1)
			2	43- 44	EXCORIATED (LFR 2)
	7400C03	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
			118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
	7422C04	NORMAL	1	117	SCHEDULED SACRIFICE
			1	117	SCHEDULED SACRIFICE
			119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	7429C05	NORMAL	1	118	SCHEDULED SACRIFICE
			1	118	SCHEDULED SACRIFICE
			62	0- 61	NO SIGNIFICANT CLINICAL OBSERVATIONS
	7428C06	NORMAL	1	117	SCHEDULED SACRIFICE
			56	62-117	PERIOULAR ENCRUSTATION (EYB 2, EYL 54)
			1	78	REDDENED EYES (EYL 1)

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
1000.0 PPM	7428C06	EYES/EARS/NOSE ORAL/DENTAL	5	63- 76	OCULAR DISCHARGE (EYL 5)
			1	77	OVERGROWN INCISORS
			13	64- 76	MALOCCLUSION
	7439C07	NORMAL	2	62- 63	ORAL LESION
			105	0-104	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
		DEAD	5	106-110	HYPOACTIVE
			9	110-118	SWELLING (LHB 9)
			13	105-117	PALLOR (BDV 13)
		BEHAVIOR/CNS BODY	4	111-114	DEHYDRATED
			4	111-114	PERINASAL ENCRUSTATION
			1	2	PERIOULAR ENCRUSTATION (EVB 1)
		EYES/EARS/NOSE	1	106	BLOOD IN URINE (BY HEMASTIX)
			5	107-111	NECROSIS (TAL 5)
			2	112-113	ONE-HALF TAIL MISSING
	7451C08	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
	7431C09	DEAD	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
	7438C10	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
	7478C11	DEAD	108	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
		SKIN	4	26- 29	ALOPECIA (SHR 4)
			7	19- 25	EXCORIATED (SHR 7)
	7381C12	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
			2	4- 5	PERIOULAR ENCRUSTATION (EVB 1, EYR 1)
	7466C13	DEAD	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	118	SCHEDULED SACRIFICE
	7386C14	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
	7427C15	DEAD	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
	7359C16	NORMAL	107	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
			11	73- 83	PERINASAL ENCRUSTATION
	7391C17	EYES/EARS/NOSE	96	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
			1	117	SCHEDULED SACRIFICE
			2	90- 91	SWELLING (NSE 2)
		DEAD	13	90-104	PERIOULAR ENCRUSTATION (EYR 13)
			23	90-112	MALOCCLUSION
			6	90- 95	ORAL LESION

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
1000.0 PPM	7406C18	NORMAL	116	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	2	8- 22	PERINASAL ENCRUSTATION
	7380C19	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7399C20	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7437C21	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7452C22	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7472C23	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7350C24	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7385C25	NORMAL	117	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		CARDIO-PULMONARY	1	39	COUGHING
	7404C26	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7363C27	NORMAL	95	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	2	PERIOULAR ENCRUSTATION (EVR 1)
		SKIN	21	19- 48	EXCORIATED (LFB 1, LFR 5, PFB 9, PFL 5, PFR 1)
			2	34- 35	ALOPECIA (PFR 2)
	7440C28	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EXCRETA	1	95	LOOSE FECES
2000.0 PPM	7348D01	NORMAL	117	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	28	PERINASAL ENCRUSTATION
		OTHER	1	77	TIP OF TAIL MISSING
	7469D02	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7351D03	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7436D04	NORMAL	98	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		BODY	15	54- 73	DEHYDRATED
		EYES/EARS/NOSE	15	54- 69	PERIOULAR ENCRUSTATION (EVR 15)
			3	58- 63	OCULAR DISCHARGE (EVR 3)
	7355D05	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
2000.0 PPM					
	7355D05	DEAD	1	117	SCHEDULED SACRIFICE
	7434D06	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	2	14- 22	PERINASAL ENCRUSTATION
	7410D07	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7372D08	NORMAL	113	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	5	13- 82	PERINASAL ENCRUSTATION
	7390D09	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7443D10	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7413D11	NORMAL	86	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		BODY	1	74	SWELLING (NSE 1)
		EYES/EARS/NOSE	9	74- 82	PERIOULAR ENCRUSTATION (EYB 2, EYR 7)
		ORAL/DENTAL	2	105-106	BROKEN INCISOR
			31	74-104	MALOCCLUSION
			2	74- 75	ORAL LESION
	7403D12	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7344D13	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7398D14	NORMAL	116	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	29	PERINASAL ENCRUSTATION
			2	28- 29	PERIOULAR ENCRUSTATION (EYB 1, EYR 1)
	7454D15	NORMAL	88	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	3	58- 60	PERIOULAR ENCRUSTATION (EYB 2, EYR 1)
		ORAL/DENTAL	32	58- 89	MALOCCLUSION
			2	58- 59	ORAL LESION
	7476D16	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7360D17	NORMAL	118	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	15	PERINASAL ENCRUSTATION
			1	5	OCULAR DISCHARGE (EYR 1)
	7460D18	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7441D19	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
2000.0 PPM					
	7392D20	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7337D21	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7412D22	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7435D23	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7379D24	NORMAL	116	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	3	51- 53	PERINASAL ENCRUSTATION
	7397D25	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7445D26	NORMAL	114	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	4	19- 22	EXCORIATED (LFR 4)
	7465D27	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7362D28	NORMAL	39	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		SKIN	80	30-109	ALOPECIA (LFB 64, PFB 16)

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	FO ADULT MALES GROUP:					0.0 PPM				
	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7387A01	201.3	250.9	306.3	344.5	384.6	410.7	433.1	456.0	477.0	500.2
7483A02	198.5	246.4	289.0	319.6	343.9	358.3	378.5	398.3	408.4	429.4
7383A03	200.5	251.0	300.0	338.1	360.8	383.5	400.6	421.0	435.8	453.6
7458A04	207.7	259.0	315.0	350.7	370.4	399.5	420.5	438.5	450.8	471.3
7450A05	205.7	263.0	310.7	345.5	367.9	394.8	420.0	435.0	447.6	459.7
7335A06	205.2	251.6	298.4	332.0	356.4	381.4	405.9	423.0	435.4	460.1
7418A07	208.6	265.3	321.8	358.6	382.2	408.8	428.6	451.8	458.8	480.8
7417A08	203.6	255.6	303.6	330.4	355.7	375.7	407.6	416.5	431.3	453.0
7482A09	211.9	269.1	327.6	355.6	385.1	413.5	442.0	463.9	481.7	508.1
7345A10	206.5	261.5	303.6	324.2	346.0	363.7	387.2	400.3	408.7	430.6
7367A11	207.8	260.5	308.5	351.2	374.4	402.6	429.1	453.9	457.6	474.2
7444A12	210.5	267.2	316.4	354.7	390.6	415.0	438.3	454.1	476.3	496.6
7384A13	212.6	260.2	313.1	341.1	363.6	386.5	415.4	435.0	458.2	475.7
7455A14	218.7	270.1	311.1	338.1	365.6	392.5	415.2	433.9	449.3	464.0
7378A15	213.3	266.6	320.2	355.2	378.6	401.6	419.2	440.2	450.8	459.7
7342A16	209.0	261.2	307.4	343.9	373.5	404.4	423.2	436.5	454.9	471.1
7461A17	216.6	276.7	328.9	374.9	407.9	440.5	477.1	493.3	509.6	536.1
7484A18	215.0	264.2	313.5	354.7	382.5	417.3	448.9	466.1	491.2	519.3
7401A19	215.6	272.6	325.2	363.1	391.2	410.7	436.4	449.7	468.5	487.0
7395A20	214.3	270.0	315.9	356.1	381.1	407.6	431.0	454.0	470.7	494.0
7475A21	215.7	265.8	305.2	343.9	366.3	393.1	409.8	423.8	435.5	452.4
7389A22	213.0	268.1	319.0	350.6	370.1	393.1	413.2	439.3	457.7	482.7
7341A23	218.7	272.7	314.2	347.4	366.6	386.8	398.8	416.5	425.2	436.9
7464A24	219.1	271.5	316.8	368.2	399.5	418.6	450.5	468.4	486.0	504.8
7358A25	221.4	268.5	318.5	353.9	387.4	418.4	442.0	457.3	470.2	491.0
7480A26	223.5	285.7	339.2	366.1	393.7	430.1	456.3	487.4	504.3	530.1
7459A27	225.7	278.6	329.6	357.9	379.9	409.5	430.5	446.5	462.3	476.1
7336A28	221.7	275.1	322.7	355.1	383.9	401.3	421.5	440.7	452.0	470.6
MEAN	212.2	265.3	314.3	349.1	375.3	400.7	424.3	442.9	457.7	477.5
S.D.	7.16	9.09	10.81	12.86	15.32	18.48	21.21	22.58	25.02	27.44
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)							
	FO ADULT MALES GROUP: 0.0 PPM							
	10	11	12	13	14	15	16	17
ANIMAL								
7387A01	517.2	527.0	538.1	543.3	539.4	548.7	574.2	579.2
7483A02	444.8	446.4	450.1	454.8	466.0	473.8	483.4	491.8
7383A03	459.6	463.6	475.0	488.8	491.7	501.2	514.0	515.5
7458A04	486.7	486.7	499.9	512.4	516.5	532.1	546.1	551.2
7450A05	475.4	476.0	493.1	504.1	510.0	514.4	529.8	537.5
7335A06	477.0	493.9	512.1	526.5	522.4	523.8	539.0	546.9
7418A07	492.6	497.0	509.1	524.6	529.3	534.6	550.8	551.5
7417A08	465.8	476.7	483.6	494.8	498.7	504.6	518.3	523.1
7482A09	517.9	522.7	530.8	546.9	554.2	557.1	570.4	573.8
7345A10	439.5	445.3	459.8	464.1	463.9	474.8	480.1	486.1
7367A11	480.0	499.2	503.2	510.8	519.2	536.2	552.8	558.9
7444A12	507.6	520.6	526.0	533.8	533.1	548.1	559.1	566.9
7384A13	488.6	491.1	509.0	515.1	524.0	539.8	550.3	561.5
7455A14	473.3	484.6	489.2	494.6	502.1	514.9	531.6	531.2
7378A15	467.0	479.6	489.4	498.3	499.7	514.3	518.3	525.3
7342A16	484.4	488.4	497.4	508.8	514.8	523.1	540.9	546.3
7461A17	554.6	550.2	571.7	592.1	593.3	610.9	623.8	633.8
7484A18	536.9	543.5	557.5	565.5	572.8	592.3	610.6	612.6
7401A19	499.8	499.1	508.0	514.0	523.6	543.1	550.6	565.8
7395A20	505.7	510.9	524.7	539.9	550.0	550.5	565.7	571.2
7475A21	464.6	469.6	481.5	488.6	495.8	501.0	509.4	514.6
7389A22	494.0	491.0	503.5	506.0	505.3	525.6	542.0	550.6
7341A23	448.0	453.8	471.5	475.9	478.0	486.6	504.9	515.7
7464A24	520.5	519.1	534.3	551.2	559.6	570.6	588.4	596.9
7358A25	510.4	514.0	525.1	540.4	544.6	552.7	567.9	569.9
7480A26	546.3	550.5	568.5	587.3	592.8	601.8	623.7	635.3
7459A27	488.8	486.4	490.5	499.2	507.1	520.2	533.8	535.0
7336A28	485.0	482.1	505.3	520.9	521.2	536.7	548.7	550.8
MEAN	490.4	495.3	507.4	518.0	522.5	533.3	547.4	553.5
S.D.	29.15	28.38	29.83	32.90	32.85	33.87	36.05	36.65
N	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	0	1	2	FO ADULT MALES GROUP: 3	300.0 PPM 4	5	6	7	8	9
ANIMAL										
7447B01	198.8	254.4	296.0	328.8	348.9	374.9	400.6	418.4	427.8	444.6
7425B02	206.5	258.4	314.8	348.9	383.1	405.0	430.8	382.0	418.4	471.3
7421B03	198.6	247.7	296.5	331.9	359.2	390.0	417.4	443.5	461.1	477.0
7339B04	204.7	260.9	309.3	345.9	385.6	422.6	452.8	481.3	499.8	518.6
7467B05	201.2	252.3	292.5	329.1	350.9	375.6	394.8	409.1	424.3	437.6
7424B06	206.2	263.1	316.7	366.1	403.8	440.3	470.5	491.9	515.0	533.1
7446B07	208.8	262.0	312.1	343.6	375.4	412.4	439.1	456.9	472.8	499.3
7481B08	209.3	255.6	301.6	331.1	357.6	385.8	405.8	416.7	381.6	433.2
7393B09	206.0	251.1	287.4	315.3	337.5	355.3	369.9	383.4	395.5	409.6
7373B10	205.2	257.3	301.3	328.9	351.5	378.9	403.5	428.9	439.3	459.1
7414B11	202.1	246.4	286.5	308.9	327.5	347.7	364.7	379.2	388.9	408.3
7416B12	212.1	264.9	313.2	354.8	380.0	403.2	422.7	438.0	448.8	469.9
7430B13	214.4	267.2	316.3	357.7	386.1	406.2	438.1	460.3	484.0	503.2
7347B14	214.0	266.7	309.1	341.0	367.5	391.4	420.1	436.4	449.9	466.9
7449B15	212.1	265.1	312.2	344.6	368.1	396.4	422.2	447.7	466.6	484.9
7371B16	216.3	275.9	333.2	375.2	409.9	437.6	459.5	488.1	503.8	527.9
7356B17	218.4	271.6	313.7	341.7	366.7	399.9	422.0	442.0	454.8	475.5
7477B18	216.1	274.9	320.0	355.9	390.2	419.9	445.1	466.4	477.5	498.8
7354B19	215.8	271.6	315.5	349.8	375.4	413.4	440.8	466.3	482.9	509.0
7405B20	214.5	266.0	311.7	341.1	359.8	381.0	396.9	411.9	419.7	434.7
7366B21	217.8	271.6	328.3	363.2	381.5	402.2	443.1	464.1	484.1	505.1
7396B22	214.4	272.1	321.3	355.0	394.3	427.6	437.1	456.0	434.5	435.2
7468B23	226.4	284.6	348.5	399.2	442.4	481.7	507.2	539.5	560.1	589.5
7453B24	219.9	281.4	341.9	389.7	434.3	458.1	492.0	506.0	522.8	537.3
7402B25	220.0	283.5	322.4	358.8	391.0	420.4	450.7	474.1	489.2	502.8
7388B26	220.7	284.4	338.2	372.0	402.1	426.5	457.3	480.5	508.5	522.0
7473B27	230.1	292.4	342.3	401.2	428.0	466.6	493.3	518.9	532.2	546.8
7462B28	221.8	280.8	325.8	361.8	389.6	407.9	424.2	446.0	448.0	466.5
MEAN	212.6	267.3	315.3	351.5	380.3	408.2	432.9	451.2	464.0	484.6
S.D.	8.06	12.12	16.24	22.52	27.71	31.08	34.06	39.77	44.39	43.55
N	28	28	28	28	28	28	28	28	28	28



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)							
	10	11	12	FO ADULT MALES GROUP: 13	300.0 PPM 14	15	16	17
ANIMAL								
7447B01	456.9	456.8	470.8	486.4	495.3	513.2	524.3	530.9
7425B02	483.8	490.2	501.3	508.4	525.5	524.4	538.8	550.0
7421B03	487.7	489.2	499.4	508.2	514.6	527.9	537.5	545.6
7339B04	528.8	535.5	558.1	575.5	576.7	589.3	607.5	613.9
7467B05	445.4	446.9	455.0	467.0	477.7	485.4	492.8	494.7
7424B06	541.1	539.2	554.3	569.0	583.3	601.5	618.7	625.6
7446B07	506.9	512.3	519.8	534.5	541.2	555.2	566.8	569.2
7481B08	450.0	460.5	474.7	479.8	487.4	496.4	505.1	508.6
7393B09	418.1	418.3	420.9	430.0	435.4	450.0	457.4	457.9
7373B10	479.2	483.6	495.0	508.5	506.5	525.3	535.5	545.1
7414B11	424.0	423.9	435.0	439.5	452.5	457.2	473.6	473.0
7416B12	471.8	468.4	478.1	486.1	489.2	505.9	514.7	523.3
7430B13	515.1	527.3	535.7	546.7	558.3	568.3	582.8	587.3
7347B14	474.5	482.3	492.3	505.4	510.0	530.2	512.5	514.5
7449B15	498.0	504.9	521.0	531.5	542.5	549.2	566.3	570.3
7371B16	544.1	547.1	554.8	570.3	582.1	593.3	609.5	611.2
7356B17	486.9	481.8	494.3	503.2	514.7	519.1	536.1	542.7
7477B18	514.0	515.6	529.9	541.5	545.6	563.0	578.1	588.1
7354B19	522.0	523.3	535.2	548.4	541.9	567.7	591.4	601.3
7405B20	440.2	434.9	444.1	452.3	457.5	469.4	482.4	485.1
7366B21	519.5	522.9	534.0	548.0	561.9	580.8	599.0	605.6
7396B22	463.2	479.5	485.3	493.8	504.7	523.8	534.0	542.0
7468B23	600.4	605.3	621.5	635.6	641.2	666.2	695.5	704.9
7453B24	557.8	571.6	589.7	604.9	613.9	629.1	636.7	650.5
7402B25	518.6	520.1	533.8	545.0	548.0	559.0	581.7	594.3
7388B26	539.7	536.7	557.2	560.4	563.4	591.3	609.4	612.5
7473B27	562.8	559.9	566.5	586.1	592.4	595.8	614.7	620.3
7462B28	473.6	478.4	493.7	504.0	509.0	514.5	527.1	531.2
MEAN	497.3	500.6	512.5	523.9	531.2	544.7	558.2	564.3
S.D.	44.22	45.03	47.11	49.29	49.10	51.36	55.33	57.20
N	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)										
FO ADULT MALES GROUP: 1000.0 PPM										
WEEK	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7346C01	199.0	253.9	304.6	342.0	371.5	403.6	424.2	448.0	474.5	486.4
7340C02	206.3	251.9	306.8	348.7	381.1	401.0	423.6	448.3	467.3	481.1
7400C03	203.6	263.4	314.1	343.4	375.1	401.4	423.4	446.6	469.1	477.4
7422C04	201.0	258.0	309.0	350.7	390.3	405.9	429.4	457.1	481.6	498.3
7429C05	206.4	265.3	316.1	356.9	393.7	423.9	447.7	473.8	493.8	512.0
7428C06	199.2	255.5	312.5	359.8	397.3	409.8	440.1	468.2	490.3	480.1
7439C07	207.3	267.9	318.1	352.4	383.3	401.4	424.3	447.8	461.7	483.7
7451C08	207.1	254.3	306.6	340.5	374.6	400.5	421.8	442.7	463.5	482.7
7431C09	213.0	265.7	309.9	342.4	374.5	395.5	409.6	428.7	449.8	464.9
7438C10	209.6	266.8	311.7	346.7	375.5	401.1	429.9	450.0	467.9	493.4
7478C11	214.1	269.1	300.8	324.4	334.6	355.4	376.9	389.3	401.1	418.2
7381C12	216.5	273.3	326.5	372.5	403.2	427.8	450.6	472.5	492.6	512.6
7466C13	214.1	262.7	310.2	356.4	388.3	408.8	426.7	452.3	473.6	491.7
7386C14	214.6	272.6	330.9	371.6	397.4	415.7	440.9	464.5	480.1	501.6
7427C15	212.3	271.4	323.6	373.0	408.1	430.6	459.4	479.7	502.0	518.8
7359C16	213.6	278.6	341.4	385.7	425.3	446.8	478.5	500.1	519.9	533.7
7391C17	216.1	277.1	328.7	368.7	404.7	426.5	447.1	467.6	487.4	506.3
7406C18	213.4	267.9	315.1	354.9	387.3	412.4	440.0	449.5	480.7	489.6
7380C19	216.1	272.9	328.5	369.2	400.6	424.0	445.2	462.6	484.2	503.6
7399C20	214.1	273.6	323.8	363.6	394.3	416.1	450.2	474.4	489.1	509.6
7437C21	218.6	268.5	312.2	353.1	383.3	410.0	429.6	447.6	464.9	481.5
7452C22	220.1	279.8	332.0	369.2	401.3	428.0	446.5	475.0	479.0	481.5
7472C23	224.3	276.9	322.9	363.2	396.1	426.8	447.3	473.2	488.0	506.0
7350C24	224.3	288.5	350.5	391.9	423.5	450.2	478.4	502.7	519.3	547.1
7385C25	220.8	273.4	319.7	353.9	380.6	410.4	430.5	451.1	468.1	485.9
7404C26	222.6	278.4	338.2	385.2	418.9	451.2	476.2	503.3	521.9	537.6
7363C27	224.9	282.4	329.4	360.3	391.0	425.8	454.8	479.6	498.6	520.7
7440C28	222.5	274.6	320.5	348.6	377.0	398.0	418.1	435.2	450.5	467.3
MEAN	213.4	269.4	320.2	358.9	390.4	414.6	438.2	460.4	479.3	495.5
S.D.	7.55	9.11	11.92	15.26	18.34	19.43	21.57	23.72	24.25	25.52
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)							
	10	11	12	FO ADULT MALES GROUP: 13	1000.0 PPM 14	15	16	17
ANIMAL								
7346C01	502.6	508.4	527.3	498.3	520.0	523.9	537.0	544.0
7340C02	488.1	498.3	499.5	515.6	526.5	530.7	547.7	558.5
7400C03	484.7	481.9	508.5	526.5	524.7	532.5	543.7	551.9
7422C04	509.2	505.1	521.7	541.0	550.1	566.0	581.5	590.8
7429C05	523.1	526.3	540.2	551.0	564.6	569.8	579.3	586.3
7428C06	486.3	481.9	488.9	480.0	511.8	518.4	526.2	541.6
7439C07	489.5	480.6	479.8	472.5	471.9	434.5	420.2	435.0
7451C08	487.9	490.2	507.5	517.1	525.7	535.4	538.8	547.0
7431C09	476.1	474.4	481.1	492.0	500.8	505.3	513.4	517.6
7438C10	511.3	520.6	535.2	552.3	561.8	575.4	588.9	606.0
7478C11	420.3	424.6	428.1	435.2	440.3	455.2	469.9	477.5
7381C12	520.6	512.6	522.3	542.0	571.6	571.4	593.3	598.4
7466C13	502.2	512.7	522.3	530.4	548.8	561.7	574.9	586.0
7386C14	517.0	517.7	533.1	539.8	540.6	551.5	570.9	575.6
7427C15	527.5	530.9	541.5	553.8	566.3	583.9	596.7	574.5
7359C16	539.5	536.2	556.3	570.9	585.3	592.1	603.7	618.5
7391C17	516.4	521.3	536.3	532.8	545.8	561.0	566.0	579.0
7406C18	498.0	496.7	508.8	528.3	533.6	540.1	559.0	561.5
7380C19	514.5	502.5	530.5	537.2	555.9	576.1	590.2	608.9
7399C20	523.9	528.0	542.4	550.0	561.2	571.1	578.6	585.0
7437C21	491.9	501.5	511.9	527.7	530.4	543.3	558.1	566.8
7452C22	506.6	512.6	528.7	540.4	541.1	550.5	568.0	568.7
7472C23	518.2	512.1	540.0	555.6	561.6	582.4	594.5	603.6
7350C24	561.9	567.2	595.2	617.3	623.8	635.0	649.3	652.7
7385C25	497.8	500.8	506.6	515.8	524.7	539.7	551.2	552.9
7404C26	549.0	544.3	560.2	571.7	574.5	587.8	602.5	615.3
7363C27	541.5	545.7	564.4	577.0	584.7	605.2	621.0	642.4
7440C28	474.2	470.1	485.2	497.8	507.0	518.6	533.6	541.7
MEAN	506.4	507.3	521.5	531.1	541.3	550.7	562.8	571.0
S.D.	27.55	27.96	32.22	36.10	36.39	41.69	45.28	45.41
N	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7348D01	196.1	230.8	274.9	302.1	324.5	342.8	357.6	367.4	385.0	401.9
7469D02	201.0	251.7	295.3	318.7	336.8	353.8	371.2	382.5	398.9	405.5
7351D03	200.3	253.3	300.2	325.2	348.4	355.6	367.6	385.9	400.4	416.9
7436D04	206.5	253.7	296.6	318.5	343.0	363.8	382.2	409.3	381.4	374.6
7355D05	208.2	266.2	313.9	356.9	388.4	418.9	439.6	466.6	485.6	499.7
7434D06	207.3	255.9	310.6	343.5	373.6	397.3	417.0	438.4	451.9	466.6
7410D07	201.2	257.7	312.6	340.4	387.0	409.3	435.5	456.1	473.1	491.4
7372D08	208.2	263.7	307.9	347.2	375.6	406.4	427.0	449.2	468.1	489.5
7390D09	205.6	248.4	293.8	335.4	351.5	366.7	384.1	403.9	424.9	432.1
7443D10	211.4	241.9	291.0	316.7	342.1	358.9	376.7	390.4	407.8	427.9
7413D11	209.4	253.8	291.7	316.2	333.1	354.9	373.0	385.6	400.1	413.3
7403D12	204.6	249.2	293.8	317.6	337.3	356.7	374.2	387.9	404.2	418.7
7344D13	213.8	261.4	303.7	332.6	353.0	364.7	376.4	397.8	412.8	428.2
7398D14	210.5	258.4	299.8	331.0	359.4	383.3	399.9	425.8	444.7	462.7
7454D15	219.6	259.4	310.8	340.2	374.4	385.5	407.1	423.2	435.0	437.6
7476D16	211.6	262.0	299.0	319.2	341.1	355.9	371.2	393.0	408.5	419.2
7360D17	214.2	268.7	319.7	366.5	399.3	428.6	456.7	493.7	511.3	533.5
7460D18	214.7	256.5	306.7	335.1	372.3	391.7	421.9	447.0	463.3	484.2
7441D19	214.8	257.4	301.1	328.7	353.4	376.6	395.5	412.2	426.7	438.7
7392D20	216.6	272.7	320.5	359.7	391.4	421.2	444.2	476.1	494.2	524.2
7337D21	212.8	262.9	307.9	339.5	365.7	380.4	404.7	422.3	439.8	458.9
7412D22	216.4	273.1	318.0	351.7	371.9	391.1	411.1	430.1	446.0	460.4
7435D23	220.8	281.1	334.0	366.3	395.0	417.9	441.1	460.6	476.1	494.0
7379D24	223.2	274.2	321.7	358.5	392.8	422.1	441.7	458.4	474.6	489.8
7397D25	225.4	280.3	340.5	384.6	417.0	441.2	464.3	491.9	507.4	523.3
7445D26	225.7	282.6	335.5	379.1	406.6	433.6	454.9	475.0	484.9	507.5
7465D27	222.9	273.8	320.0	353.9	374.1	386.4	403.9	420.2	433.8	454.9
7362D28	226.3	281.3	331.9	362.5	389.0	407.3	430.5	449.4	474.5	502.0
MEAN	212.5	261.9	309.0	341.0	367.8	388.3	408.2	428.6	443.4	459.2
S.D.	8.22	12.56	15.45	20.84	24.65	28.53	31.57	35.66	37.76	42.38
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)							
	10	11	12	FO ADULT MALES GROUP: 13	2000.0 PPM 14	15	16	17
ANIMAL								
7348D01	413.8	417.6	428.9	437.3	444.7	451.6	460.9	466.4
7469D02	417.1	434.0	437.9	445.3	450.6	460.7	476.6	478.8
7351D03	426.6	428.3	435.9	441.5	445.1	449.1	465.1	467.2
7436D04	364.4	408.5	421.6	439.4	440.1	453.3	458.4	466.0
7355D05	524.0	528.0	539.7	550.7	560.5	565.9	572.0	582.3
7434D06	479.0	475.1	490.4	501.7	497.5	512.3	518.6	526.3
7410D07	500.6	500.3	509.3	528.0	532.8	546.9	561.7	565.3
7372D08	499.5	496.9	506.3	514.2	521.1	530.8	532.2	553.4
7390D09	435.0	437.7	452.2	451.5	461.7	476.8	490.8	497.0
7443D10	444.4	440.8	453.2	462.7	468.7	467.2	481.4	485.5
7413D11	423.3	416.2	426.0	436.0	437.9	447.4	456.0	467.4
7403D12	430.2	435.0	447.0	467.5	472.1	483.6	496.1	499.9
7344D13	442.1	445.3	458.0	468.9	477.7	495.0	507.7	519.4
7398D14	479.8	482.8	497.1	513.9	521.2	536.6	553.2	560.3
7454D15	447.8	449.5	460.5	453.8	458.4	471.9	484.6	488.9
7476D16	429.7	437.1	443.0	454.2	450.7	463.7	472.8	474.2
7360D17	548.7	543.5	552.5	559.9	570.4	582.5	597.3	612.2
7460D18	502.5	500.6	512.0	523.3	529.5	545.9	553.9	566.9
7441D19	452.3	461.5	460.9	477.1	482.0	489.4	508.1	518.0
7392D20	534.0	542.0	562.1	578.7	582.3	593.7	599.6	608.5
7337D21	461.5	466.7	481.3	490.2	488.4	498.2	516.8	521.5
7412D22	475.4	470.4	478.8	490.0	494.9	505.4	518.6	529.5
7435D23	508.4	519.1	528.0	541.5	548.1	552.7	570.1	582.8
7379D24	500.2	514.6	523.7	536.5	541.5	559.3	571.2	578.3
7397D25	549.8	529.6	557.8	582.3	597.2	617.0	636.2	663.5
7445D26	514.9	524.2	538.2	550.0	552.8	565.5	574.5	585.5
7465D27	464.4	471.1	475.0	490.2	493.6	497.9	509.9	513.5
7362D28	505.5	511.2	530.8	541.8	538.2	551.2	564.0	574.6
MEAN	470.5	474.6	486.0	497.4	502.1	513.3	525.3	534.0
S.D.	45.65	41.50	43.72	45.90	47.22	48.78	49.06	52.82
N	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

	FO ADULT MALES GROUP: 0.0 PPM									
WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7387A01	23.8	26.2	28.0	27.5	28.6	29.0	27.7	28.7	28.3	30.2
7483A02	24.0	24.7	24.2	23.9	23.1	24.0	24.8	23.4	23.6	24.3
7383A03	21.7	23.3	24.6	24.5	23.3	23.3	23.3	23.4	22.5	22.9
7458A04	23.3	25.0	25.1	25.4	24.9	24.9	24.7	24.4	24.7	25.8
7450A05	24.7	25.2	26.1	26.1	25.6	25.5	25.4	25.4	24.2	24.8
7335A06	20.4	22.1	22.8	23.2	23.3	23.7	23.3	22.2	23.3	25.1
7418A07	26.0	27.8	28.0	27.1	26.7	26.8	26.5	25.3	25.5	26.3
7417A08	23.0	24.0	24.2	24.5	24.8	25.5	23.2	r/s	24.2	25.0
7482A09	26.4	r/a	27.9	28.4	27.8	29.0	26.8	27.2	27.6	27.7
7345A10	24.5	24.6	23.5	23.8	24.1	25.4	23.5	22.9	23.7	23.2
7367A11	24.2	25.5	27.0	26.5	26.2	27.7	27.3	25.5	24.3	26.1
7444A12	24.9	25.9	26.3	27.7	27.0	27.0	25.5	26.2	25.7	26.4
7384A13	23.2	24.1	23.3	24.3	23.2	25.5	25.0	25.8	25.0	24.5
7455A14	23.8	24.4	23.4	24.7	24.5	24.7	24.2	24.1	24.2	24.4
7378A15	24.1	24.8	24.5	24.1	23.3	22.7	24.6	22.9	21.8	23.6
7342A16	23.6	24.1	25.1	25.3	25.6	24.2	24.1	24.3	24.6	24.2
7461A17	25.3	26.2	27.6	27.4	26.9	27.8	27.4	26.5	27.1	27.2
7484A18	24.3	25.3	26.6	25.9	26.4	27.5	25.5	27.7	28.4	27.3
7401A19	24.3	26.1	27.1	25.8	25.5	25.9	25.7	26.1	25.1	24.5
7395A20	24.6	25.2	26.0	25.6	25.7	26.3	27.6	27.1	26.9	27.9
7475A21	24.3	25.0	27.3	25.0	24.6	25.3	25.0	24.3	23.7	24.4
7389A22	24.4	25.6	25.9	24.7	24.1	25.2	25.6	25.6	26.2	26.0
7341A23	24.9	25.0	25.6	24.6	24.4	24.1	24.2	23.6	23.3	22.6
7464A24	26.6	r/a	28.6	29.3	29.4	30.1	29.5	28.8	28.2	28.8
7358A25	22.6	23.4	23.7	25.1	25.1	24.8	23.7	23.9	24.9	26.9
7480A26	27.8	28.9	26.3	25.5	26.6	27.0	27.1	25.9	27.1	27.4
7459A27	25.2	26.2	26.0	24.7	26.1	26.0	26.6	25.2	25.4	25.5
7336A28	23.4	24.3	24.3	24.5	23.5	24.3	24.2	24.4	23.3	25.5
MEAN	24.2	25.1	25.7	25.5	25.4	25.8	25.4	25.2	25.1	25.7
S.D.	1.48	1.37	1.65	1.49	1.67	1.80	1.60	1.73	1.80	1.82
N	28	26	28	28	28	28	28	27	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT MALES GROUP: 0.0 PPM

WEEK	13	14	15	16
ANIMAL				
7387A01	r	22.6	26.3	28.8
7483A02	r	23.3	23.4	23.1
7383A03	r	22.3	22.3	22.2
7458A04	r	25.3	19.8	27.7
7450A05	r	25.2	24.5	24.8
7335A06	r	24.0	22.6	24.6
7418A07	r	25.3	19.4	25.8
7417A08	r	23.7	21.6	24.8
7482A09	r	24.1	13.3	26.2
7345A10	r	22.3	7.0	24.8
7367A11	r	27.2	28.7	29.9
7444A12	r	24.6	21.6	27.6
7384A13	r	25.0	17.9	28.0
7455A14	r	24.1	22.9	26.2
7378A15	r	23.6	25.5	24.8
7342A16	r	24.3	9.8	27.2
7461A17	r	27.0	22.9	28.4
7484A18	r	25.7	26.8	27.7
7401A19	r	24.9	25.0	25.8
7395A20	r	27.1	16.0	27.2
7475A21	r	23.5	21.9	24.7
7389A22	r	22.8	12.8	28.9
7341A23	r	23.6	12.1	25.0
7464A24	r	28.9	25.1	30.5
7358A25	r	26.1	9.1	33.8
7480A26	r	27.4	28.0	31.8
7459A27	r	24.4	24.3	24.5
7336A28	r	25.3	15.8	27.6
MEAN		24.8	20.2	26.9
S.D.		1.66	6.03	2.61
N		28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT MALES GROUP: 300.0 PPM

WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7447B01	22.3	23.8	23.6	24.5	25.2	26.5	25.7	24.7	25.2	25.4
7425B02	24.3	25.9	25.3	25.4	26.0	26.8	8.2	26.9	29.7	28.7
7421B03	23.3	24.8	25.5	25.9	26.5	26.3	27.1	25.8	25.1	25.1
7339B04	24.4	26.3	26.3	28.0	29.9	30.9	30.4	28.9	28.5	28.5
7467B05	22.6	23.0	22.3	22.0	22.0	22.2	21.6	21.2	21.9	22.1
7424B06	24.6	24.8	25.7	26.3	26.9	26.1	24.9	25.1	26.0	25.9
7446B07	23.0	24.4	23.7	24.4	25.5	25.9	25.1	24.3	25.4	24.8
7481B08	21.9	23.2	22.3	23.0	24.1	23.8	23.5	16.5	22.1	24.6
7393B09	23.4	23.5	23.9	24.2	24.2	23.4	22.8	22.7	23.2	23.2
7373B10	22.9	23.2	23.4	23.3	23.3	24.3	24.9	24.6	23.9	24.8
7414B11	22.3	22.8	22.1	21.3	21.6	22.7	22.2	21.5	22.9	23.4
7416B12	24.3	25.1	26.5	25.7	25.2	24.7	25.0	24.6	25.4	25.1
7430B13	24.2	24.7	26.3	26.0	24.5	26.6	27.0	27.4	26.9	26.9
7347B14	24.3	24.6	24.0	24.4	24.7	26.1	25.3	25.0	24.8	25.0
7449B15	24.9	25.0	25.3	25.7	26.7	28.2	27.9	28.4	27.8	27.7
7371B16	26.9	29.1	28.1	29.2	28.0	29.2	29.9	29.5	29.8	29.9
7356B17	23.7	24.1	23.6	24.6	25.0	25.2	25.1	23.6	25.7	25.0
7477B18	25.3	25.6	26.2	26.6	27.0	26.6	25.2	25.0	25.7	26.3
7354B19	25.0	26.1	24.8	25.5	26.9	27.9	26.7	26.4	27.8	28.4
7405B20	24.2	25.4	24.6	23.3	24.2	23.8	23.8	23.4	23.5	24.2
7366B21	26.0	28.0	27.1	26.1	24.4	28.2	27.1	26.5	27.1	27.1
7396B22	25.2	25.3	24.0	25.4	26.6	23.3	23.9	19.9	17.9	25.9
7468B23	26.1	27.8	29.8	30.3	31.2	29.9	32.1	31.4	31.3	29.7
7453B24	26.3	28.4	28.4	29.0	29.5	29.4	28.0	28.5	27.5	28.6
7402B25	28.4	r/a	26.3	27.2	28.1	29.4	28.9	29.1	28.4	29.1
7388B26	26.0	28.1	26.9	26.5	27.5	28.6	29.2	28.3	28.5	29.0
7473B27	29.5	r/a	32.0	31.4	32.8	32.1	31.4	30.2	30.1	31.2
7462B28	26.7	27.1	27.6	27.3	27.2	26.6	26.8	25.4	25.3	27.1
MEAN	24.7	25.4	25.6	25.8	26.2	26.6	25.7	25.5	26.0	26.5
S.D.	1.81	1.80	2.31	2.34	2.56	2.56	4.35	3.31	2.93	2.29
N	28	26	28	28	28	28	28	28	28	28



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
FO ADULT MALES GROUP: 300.0 PPM

WEEK	13	14	15	16
ANIMAL				
7447B01	✓	27.6	27.2	26.1
7425B02	✓	26.4	25.3	27.1
7421B03	✓	24.6	24.1	27.8
7339B04	✓	28.2	13.2	30.1
7467B05	✓	22.6	22.2	21.8
7424B06	✓	28.0	18.5	28.3
7446B07	✓	26.4	25.9	24.0
7481B08	✓	23.6	16.1	23.2
7393B09	✓	22.9	18.6	22.9
7373B10	✓	23.9	24.9	26.4
7414B11	✓	23.6	20.5	23.0
7416B12	✓	23.6	21.2	25.3
7430B13	✓	26.8	26.5	26.7
7347B14	✓	25.6	19.4	23.0
7449B15	✓	28.4	4.1	27.4
7371B16	✓	29.6	6.2	29.1
7356B17	✓	25.4	27.4	24.8
7477B18	✓	26.2	20.6	27.3
7354B19	✓	26.0	28.2	29.4
7405B20	✓	24.2	2.0	24.9
7366B21	✓	30.0	13.2	28.7
7396B22	✓	24.7	25.4	30.8
7468B23	✓	31.0	32.7	34.3
7453B24	✓	28.3	28.3	26.7
7402B25	✓	26.9	28.3	29.7
7388B26	✓	30.2	17.4	28.9
7473B27	✓	31.7	22.9	29.9
7462B28	✓	25.3	13.8	26.3
MEAN		26.5	20.5	26.9
S.D.		2.52	7.65	2.89
N		28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

	FO ADULT MALES GROUP: 1000.0 PPM									
WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7346C01	23.5	25.3	24.9	25.9	25.3	25.0	24.4	26.7	26.5	26.2
7340C02	22.3	24.0	24.3	24.7	24.3	23.4	23.3	24.8	24.7	25.0
7400C03	23.3	23.6	22.6	22.7	23.7	23.9	23.6	24.2	24.2	23.5
7422C04	23.4	24.5	24.5	25.1	24.2	24.7	25.6	27.6	26.5	25.5
7429C05	24.0	25.5	24.8	24.7	25.3	25.4	25.9	26.1	26.5	27.2
7428C06	23.7	25.7	25.3	26.8	25.7	27.0	27.7	26.8	26.5	23.8
7439C07	25.3	26.7	25.4	24.9	24.4	24.3	25.7	25.4	25.5	25.5
7451C08	23.3	24.2	23.8	24.2	25.3	24.8	24.4	25.7	26.9	26.3
7431C09	24.8	24.9	23.6	24.5	24.9	24.8	24.3	24.7	25.3	25.3
7438C10	24.4	25.1	24.9	25.5	25.3	26.1	25.3	26.1	27.6	27.8
7478C11	25.4	25.5	23.0	23.9	23.7	25.0	25.2	25.4	25.7	24.8
7381C12	26.9	r/a	29.3	28.7	28.2	28.6	28.9	29.4	29.4	28.4
7466C13	24.2	24.3	24.0	25.7	24.5	25.8	30.4	26.9	26.3	26.3
7386C14	24.8	26.4	26.9	25.9	24.6	25.8	26.1	26.9	27.2	27.1
7427C15	24.4	25.6	25.5	26.2	25.4	24.9	24.9	25.3	26.5	26.0
7359C16	25.8	28.2	27.9	28.2	27.5	28.4	27.4	28.7	27.7	25.9
7391C17	25.5	r/a	26.4	26.4	26.5	26.1	26.0	26.0	25.6	26.2
7406C18	23.6	24.4	24.7	25.8	25.1	24.9	25.2	26.4	24.7	25.6
7380C19	26.2	r/a	28.4	28.4	27.0	27.7	28.4	r/s	27.9	26.6
7399C20	24.7	27.4	26.4	27.7	27.9	28.7	27.5	27.4	27.9	27.2
7437C21	24.7	25.0	25.3	25.7	26.8	26.0	25.7	26.0	26.6	27.2
7452C22	26.9	27.6	27.6	27.6	27.2	27.7	28.0	27.2	27.2	26.7
7472C23	28.0	27.5	27.1	28.3	29.4	28.9	29.1	29.7	29.5	29.4
7350C24	27.1	r/a	28.8	28.8	29.0	29.2	29.3	28.6	28.9	28.7
7385C25	22.9	23.6	24.0	24.8	23.1	23.2	23.1	23.3	23.3	23.9
7404C26	25.6	27.9	28.7	29.2	28.4	28.8	27.9	27.8	28.2	27.6
7363C27	24.3	24.5	24.0	25.1	25.8	27.7	27.6	27.3	27.4	28.7
7440C28	23.1	24.3	23.4	24.6	24.4	24.5	23.8	26.0	24.5	24.5
MEAN	24.7	25.5	25.5	26.1	25.8	26.1	26.3	26.5	26.6	26.3
S.D.	1.41	1.41	1.90	1.71	1.69	1.82	2.00	1.54	1.54	1.52
N	28	24	28	28	28	28	28	27	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F0 ADULT MALES GROUP: 1000.0 PPM

WEEK	13	14	15	16
ANIMAL				
7346C01	r	20.5	18.3	22.4
7340C02	r	26.5	24.3	24.3
7400C03	r	24.5	23.9	24.0
7422C04	r	26.6	26.8	27.3
7429C05	r	27.4	27.2	26.2
7428C06	r	25.1	25.1	23.9
7439C07	r	24.5	15.6	19.8
7451C08	r	24.8	3.6	25.3
7431C09	r	23.9	23.2	23.2
7438C10	r	28.1	16.6	27.8
7478C11	r	23.9	24.6	25.6
7381C12	r	28.6	12.9	30.9
7466C13	r	27.0	25.8	26.2
7386C14	r	25.2	19.0	28.2
7427C15	r	27.6	19.9	27.4
7359C16	r	28.9	14.0	27.0
7391C17	r	24.5	14.4	24.8
7406C18	r	24.7	14.6	26.5
7380C19	r	27.0	28.2	28.8
7399C20	r	26.1	3.4	26.6
7437C21	r	26.2	16.9	26.8
7452C22	r	27.3	5.9	30.2
7472C23	r	30.0	31.1	31.3
7350C24	r	31.1	28.9	31.0
7385C25	r	23.2	23.9	23.8
7404C26	r	27.8	12.5	28.8
7363C27	r	27.2	15.4	30.2
7440C28	r	25.8	7.5	26.7
MEAN		26.2	18.7	26.6
S.D.		2.21	7.76	2.79
N		28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

	FO ADULT MALES GROUP: 2000.0 PPM									
WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7348D01	18.3	21.2	22.2	21.3	21.8	21.5	21.4	22.2	22.5	23.3
7469D02	22.3	22.6	22.3	22.2	22.0	22.3	22.0	22.5	21.8	22.9
7351D03	r/s	25.5	23.5	24.5	23.5	22.9	23.4	24.4	24.3	23.5
7436D04	23.7	26.2	24.7	25.2	25.2	25.1	26.0	20.4	17.0	12.8
7355D05	22.6	23.7	24.7	24.4	24.8	24.3	25.1	25.5	24.1	25.4
7434D06	21.0	23.4	24.4	24.2	23.3	23.3	22.9	23.9	21.9	23.5
7410D07	22.1	25.3	25.1	25.8	25.7	26.2	24.7	25.9	25.0	25.6
7372D08	23.4	25.3	24.7	24.7	24.9	24.3	25.0	25.1	25.0	24.7
7390D09	20.4	24.0	24.4	23.6	22.5	22.3	22.3	24.0	22.5	22.4
7443D10	18.2	22.1	20.8	21.1	20.9	20.8	20.7	21.9	21.9	22.1
7413D11	21.2	r/s	20.4	21.6	22.1	23.1	21.8	22.7	22.0	22.0
7403D12	20.9	22.8	21.8	21.1	21.3	21.7	20.6	20.8	21.1	21.9
7344D13	20.8	24.3	24.5	23.8	23.2	22.4	23.1	24.2	23.8	24.5
7398D14	21.2	22.5	23.7	24.4	22.4	24.0	24.1	25.0	24.1	24.9
7454D15	21.2	26.3	26.4	26.5	25.4	25.4	25.9	26.2	23.0	26.0
7476D16	22.5	23.9	21.7	23.5	22.6	23.1	22.7	24.7	24.2	24.1
7360D17	22.7	25.9	27.1	27.8	27.6	27.1	28.2	28.1	27.7	27.4
7460D18	20.0	24.2	24.5	25.6	25.1	25.2	25.1	25.8	25.0	26.0
7441D19	r/s	r/s	23.1	27.6	27.0	23.1	23.0	r/s	22.7	22.5
7392D20	23.9	23.9	25.4	26.1	26.8	27.0	27.7	27.3	27.7	27.5
7337D21	22.9	24.2	24.9	24.7	24.5	24.6	24.6	25.3	24.2	24.0
7412D22	23.0	25.0	23.9	23.6	23.7	24.2	24.5	24.4	24.6	24.1
7435D23	23.9	26.6	25.5	26.6	27.2	27.7	27.3	26.0	26.8	27.2
7379D24	24.0	25.6	25.9	26.7	26.3	26.4	25.8	25.8	25.5	24.9
7397D25	24.4	r/a	28.5	27.9	28.9	27.6	28.2	29.0	27.7	29.1
7445D26	26.2	26.6	28.6	29.0	28.0	27.4	27.4	26.6	25.9	26.3
7465D27	23.6	26.1	25.9	26.5	25.5	26.0	25.8	26.8	26.2	26.0
7362D28	25.8	26.6	27.0	27.6	26.0	27.9	26.6	27.7	27.8	27.1
MEAN	22.3	24.5	24.5	24.9	24.6	24.5	24.5	24.9	24.1	24.3
S.D.	1.98	1.55	2.07	2.20	2.19	2.10	2.24	2.15	2.42	2.94
N	26	25	28	28	28	28	28	27	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT MALES GROUP: 2000.0 PPM

WEEK	13	14	15	16
ANIMAL				
7348D01	r	23.8	23.5	22.7
7469D02	r	23.5	8.7	31.5
7351D03	r	23.6	23.1	24.0
7436D04	r	24.3	24.7	28.3
7355D05	r	25.1	26.4	25.1
7434D06	r	22.7	8.1	23.2
7410D07	r	25.5	22.7	25.6
7372D08	r	24.6	14.9	26.3
7390D09	r	22.5	22.8	23.5
7443D10	r	22.0	14.6	21.1
7413D11	r	20.4	21.4	21.6
7403D12	r	23.0	16.7	23.4
7344D13	r	25.5	25.3	25.2
7398D14	r	24.4	23.2	26.2
7454D15	r	25.3	27.1	30.1
7476D16	r	24.2	24.2	25.6
7360D17	r	27.3	27.0	28.6
7460D18	r	25.2	25.6	28.5
7441D19	r	22.7	22.7	23.3
7392D20	r	27.5	4.9	27.9
7337D21	r	24.3	24.8	25.2
7412D22	r	25.2	11.1	26.0
7435D23	r	28.2	26.6	27.8
7379D24	r	24.9	1.7	26.8
7397D25	r	31.4	31.4	30.4
7445D26	r	29.3	28.2	28.4
7465D27	r	26.4	27.1	26.7
7362D28	r	27.1	19.6	29.6
MEAN		25.0	20.7	26.2
S.D.		2.33	7.64	2.72
N		28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F0 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
0.0 PPM					
	7529A01	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7634A02	NORMAL	112	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	3	5- 7	PERIOPULAR ENCRUSTATION (EYR 3)
		ORAL/DENTAL	4	5- 8	ORAL LESION
	7505A03	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7513A04	NORMAL	59	0- 76	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		SKIN	57	32-115	ALOPECIA (LFB 53, LFL 4)
	7517A05	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7601A06	NORMAL	80	0-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		SKIN	8	16-116	ALOPECIA (LFB 3, PFR 5)
			18	23- 40	CRUST (SHL 18)
			11	5- 15	EXCORIATED (LFB 5, LFR 6)
	7503A07	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7611A08	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7605A09	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7593A10	NORMAL	24	0- 85	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		SKIN	93	9-116	ALOPECIA (LFB 20, LFR 5, PFB 67, PFR 1)
	7512A11	NORMAL	114	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	4	86- 89	ALOPECIA (PFR 4)
	7638A12	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7628A13	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7639A14	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7618A15	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7555A16	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7609A17	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7643A18	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F0 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
0.0 PPM					
	7643A18	DEAD	1	116	SCHEDULED SACRIFICE
	7635A19	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7629A20	NORMAL	92	0-104	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	26	6-117	ALOPECIA (LFB 13, PFB 12, PFR 1)
	7620A21	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7511A22	NORMAL	114	0-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		SKIN	1	114	ALOPECIA (LFB 1)
	7619A23	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	1	117	ALOPECIA (LFB 1)
	7522A24	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7563A25	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7586A26	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7531A27	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7598A28	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
300.0 PPM					
	7621B01	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7509B02	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7532B03	NORMAL	120	0-119	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	119	SCHEDULED SACRIFICE
	7508B04	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7538B05	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7579B06	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7537B07	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7574B08	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7627B09	NORMAL	114	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F0 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
300.0 PPM	7627B09	EYES/EARS/NOSE	3	35- 37	PERIOULAR ENCRUSTATION (EYL 3)
	7561B10	NORMAL	109	0-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		SKIN	6	84-114	ALOPECIA (LFB 1, LFL 5)
	7608B11	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7564B12	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7630B13	NORMAL	97	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		SKIN	15	3- 20	EXCORIATED (SHL 15)
			3	16- 18	ALOPECIA (SHL 3)
	7518B14	NORMAL	78	0- 98	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	35	6-115	PERIOULAR ENCRUSTATION (EYR 35)
			5	77- 81	OCULAR DISCHARGE (EYR 5)
			1	13	NASAL DISCHARGE
		ORAL/DENTAL	2	100-101	ORAL LESION
			2	85-100	OVERGROWN INCISORS
			8	6- 18	MALOCCLUSION
	7585B15	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7642B16	NORMAL	132	0-131	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	131	SCHEDULED SACRIFICE
	7600B17	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7603B18	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7520B19	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7541B20	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7623B21	NORMAL	105	0-104	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		SKIN	12	105-116	ALOPECIA (LFB 12)
			2	105-106	EXCORIATED (LFL 2)
	7631B22	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7578B23	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7527B24	NORMAL	56	0- 55	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		SKIN	59	56-114	ALOPECIA (LFB 58, LFL 1)



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F0 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
300.0 PPM	7524B25	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7552B26	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7590B27	NORMAL	74	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		SKIN	42	19- 97	ALOPECIA (LFL 3, PFB 37, PFR 2)
	7566B28	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
1000.0 PPM		DEAD	1	116	SCHEDULED SACRIFICE
	7550C01	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7588C02	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7556C03	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7633C04	NORMAL	114	0-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	7533C05	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7504C06	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7582C07	NORMAL	98	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		BODY	2	62- 63	SWELLING (FAC 2)
		SKIN	2	77- 78	SCAR (FAC 2)
			3	74- 76	ALOPECIA (FAC 3)
			20	62- 73	CRUST (FAC 12, MTH 8)
	7624C08	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7542C09	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7543C10	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7572C11	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7573C12	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7616C13	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7540C14	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7617C15	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
1000.0 PPM	7617C15	DEAD	1	116	SCHEDULED SACRIFICE
	7565C16	NORMAL	114	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		SKIN	2	14- 15	EXCORIATED (PFL 2)
	7516C17	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7625C18	NORMAL	115	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		BEHAVIOR/CNS	1	94	PROLONGED DELIVERY
	7626C19	NORMAL	117	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EXCRETA	1	113	LOOSE FECES
	7559C20	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7546C21	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7571C22	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7606C23	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7498C24	NORMAL	47	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	69	35-116	PERIOULAR ENCRUSTATION (EVR 69)
			1	102	SWOLLEN PERIOULAR TISSUE (EVR 1)
			13	36- 63	OCULAR DISCHARGE (EVR 13)
			1	49	LACRIMATION (EVR 1)
	7615C25	NORMAL	49	0- 81	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	69	20-117	ALOPECIA (LFB 56, PFB 13)
	7612C26	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7589C27	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7502C28	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
2000.0 PPM	7495D01	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7539D02	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7519D03	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7515D04	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
2000.0 PPM					
	7515D04	DEAD	1	116	SCHEDULED SACRIFICE
	7568D05	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7636D06	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7545D07	NORMAL	95	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		SKIN	20	70- 89	ALOPECIA (LFL 20)
	7575D08	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7584D09	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7610D10	NORMAL	117	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	7536D11	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7591D12	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7554D13	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7557D14	NORMAL	49	0- 48	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		BODY	24	70- 96	URINE STAINS
			2	69- 70	SWELLING (NSE 2)
			2	67- 68	TRAUMATIZED (NSE 2)
		EYES/EARS/NOSE	64	49-117	PERIOULAR ENCRUSTATION (EVB 51, EYL 13)
			1	110	LACRIMATION (EVB 1)
			6	55- 66	OCULAR DISCHARGE (EYL 6)
			5	62- 66	REDDENED EYES (EYL 5)
		ORAL/DENTAL	1	100	OVERGROWN INCISORS
			16	67- 82	MALOCCLUSION
			6	67- 72	PERIORAL ENCRUSTATION
	7548D15	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	7569D16	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7567D17	NORMAL	134	0-133	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	133	SCHEDULED SACRIFICE
	7632D18	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7528D19	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7547D20	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
FO ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
2000.0 PPM	7547D20	DEAD	1	115	SCHEDULED SACRIFICE
	7549D21	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7583D22	NORMAL	119	0-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	7523D23	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7544D24	NORMAL	116	0-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	7637D25	NORMAL	110	0-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	6	76- 81	PERIOCLAR ENCRUSTATION (EYR 6)
		ORAL/DENTAL	2	76-100	OVERGROWN INCISORS
	7594D26	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7596D27	NORMAL	115	0-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	7510D28	NORMAL	118	0-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	FO ADULT FEMALES GROUP:					0.0 PPM				
	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7529A01	145.5	164.0	173.4	188.1	198.2	205.1	206.1	217.5	232.1	239.8
7634A02	145.1	169.3	189.1	205.3	211.7	225.3	241.1	249.8	257.3	268.5
7505A03	148.7	169.9	174.6	189.6	205.0	210.4	220.8	242.6	257.5	264.9
7513A04	145.1	164.6	176.9	189.6	196.8	219.8	224.9	227.6	239.5	252.8
7517A05	145.4	169.4	190.7	192.0	206.9	209.5	216.2	233.2	235.4	245.0
7601A06	146.2	158.2	179.2	185.7	202.4	211.4	226.8	233.6	251.6	264.6
7503A07	141.8	168.1	183.2	198.4	221.6	221.5	229.3	235.5	239.9	255.5
7611A08	151.3	165.6	182.9	200.1	203.3	208.9	216.1	224.2	232.4	237.9
7605A09	146.2	169.0	182.5	198.3	211.0	217.4	235.2	242.1	252.3	263.9
7593A10	147.7	164.2	171.6	190.9	197.2	200.4	218.2	222.6	233.3	241.9
7512A11	145.8	163.8	176.6	192.0	205.5	208.3	209.8	231.4	239.6	244.1
7638A12	148.7	172.6	191.5	198.3	208.6	216.6	220.7	223.9	231.1	240.6
7628A13	150.4	183.7	219.0	212.9	228.1	244.3	255.2	260.8	259.8	272.6
7639A14	155.2	179.0	208.8	224.8	240.0	250.6	263.8	277.5	282.2	286.6
7618A15	156.3	174.9	199.9	216.6	225.3	227.7	242.9	250.2	252.6	267.4
7555A16	149.8	161.8	183.6	204.7	218.5	218.0	242.2	250.7	254.5	263.3
7609A17	146.9	177.3	201.3	214.7	235.5	243.1	253.8	263.2	267.7	280.1
7643A18	150.5	171.3	186.9	196.9	207.4	219.8	230.6	245.3	258.5	264.0
7635A19	153.8	170.9	190.9	200.1	210.0	214.4	222.3	233.6	237.0	242.0
7629A20	153.8	185.2	207.9	222.9	224.5	236.0	244.7	242.6	252.1	256.6
7620A21	158.4	182.5	192.8	195.7	210.6	225.4	237.7	248.2	274.7	280.2
7511A22	156.9	171.8	195.4	200.7	219.6	221.4	234.4	244.8	248.4	257.3
7619A23	154.7	179.7	200.0	221.9	238.6	254.1	259.8	280.7	289.0	287.6
7522A24	154.3	172.7	184.1	197.4	210.5	216.3	225.4	237.6	242.0	244.6
7563A25	152.8	168.8	189.4	203.5	209.6	223.9	237.0	247.5	245.8	257.8
7586A26	153.2	186.6	193.4	213.4	221.5	221.4	240.5	252.7	259.3	264.6
7531A27	151.0	172.3	200.4	207.3	220.5	231.7	242.5	243.7	246.7	259.1
7598A28	151.6	170.1	181.7	196.0	212.9	218.6	224.9	237.9	243.8	256.9
MEAN	150.2	171.7	189.6	202.1	214.3	222.2	233.0	242.9	250.6	259.3
S.D.	4.28	7.24	11.59	11.03	11.89	13.37	14.76	15.12	14.88	14.14
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F0 ADULT FEMALES GROUP: 0.0 PPM

WEEK	10
ANIMAL	
7529A01	239.7
7634A02	285.3
7505A03	257.7
7513A04	258.3
7517A05	243.1
7601A06	270.3
7503A07	253.0
7611A08	241.1
7605A09	251.5
7593A10	251.3
7512A11	238.6
7638A12	246.7
7628A13	276.5
7639A14	295.9
7618A15	271.8
7555A16	270.5
7609A17	288.5
7643A18	267.3
7635A19	246.2
7629A20	260.7
7620A21	284.8
7511A22	257.1
7619A23	295.0
7522A24	245.6
7563A25	262.1
7586A26	274.0
7531A27	257.1
7598A28	256.1
MEAN	262.4
S.D.	16.81
N	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	FO ADULT FEMALES GROUP: 300.0 PPM									
	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7621B01	139.7	154.8	171.6	185.8	190.3	202.5	216.1	224.6	230.4	242.0
7509B02	141.2	163.7	179.9	196.3	196.0	216.5	233.9	243.1	245.1	266.0
7532B03	139.1	165.8	185.3	193.7	193.0	203.5	211.8	218.6	220.9	231.7
7508B04	145.7	154.6	181.2	196.0	205.4	230.6	250.1	265.8	269.9	285.5
7538B05	142.0	161.1	179.4	200.0	207.7	215.3	230.1	251.1	264.2	267.4
7579B06	143.3	166.3	174.1	189.5	194.1	208.5	223.0	227.8	246.7	247.5
7537B07	144.1	174.8	197.3	210.7	213.2	229.4	240.3	247.9	250.2	266.5
7574B08	143.6	158.0	182.7	192.4	204.0	211.4	231.3	242.6	249.3	253.0
7627B09	144.4	154.9	178.6	193.4	199.6	206.4	216.7	228.8	228.4	242.2
7561B10	148.9	168.5	195.7	209.6	224.1	230.5	249.7	256.2	260.4	271.2
7608B11	146.4	163.9	175.9	192.2	198.0	208.1	211.8	221.1	231.8	232.8
7564B12	147.5	165.8	182.3	185.1	191.2	203.8	213.7	231.5	235.6	247.5
7630B13	142.2	169.5	187.6	205.0	213.9	224.6	236.2	247.0	251.1	257.1
7518B14	144.8	159.2	172.9	193.6	204.0	224.9	239.4	248.6	249.9	259.4
7585B15	150.4	169.1	176.2	190.7	198.0	217.6	227.1	239.3	246.9	249.8
7642B16	152.3	179.7	206.3	218.5	232.4	245.7	257.3	267.7	278.3	287.5
7600B17	154.3	175.5	199.4	207.7	230.4	244.7	257.4	269.7	282.4	296.0
7603B18	153.6	181.7	204.0	217.4	229.5	235.9	254.2	264.8	275.1	283.2
7520B19	156.7	195.9	197.9	204.6	210.5	231.5	241.0	249.8	253.9	264.0
7541B20	151.4	174.4	193.9	219.9	234.9	248.3	265.3	277.7	282.5	290.1
7623B21	153.2	179.6	194.2	192.9	212.9	225.4	238.6	240.4	258.1	263.0
7631B22	154.1	180.0	198.4	203.0	225.6	240.3	246.3	266.4	269.5	275.7
7578B23	151.6	167.1	195.0	208.4	221.0	238.6	248.4	251.5	258.2	266.1
7527B24	160.7	170.4	197.6	209.7	218.2	233.5	256.2	275.4	279.1	277.2
7524B25	160.0	181.6	197.8	223.6	234.8	248.7	255.6	271.8	283.5	287.1
7552B26	154.4	168.8	191.9	199.1	208.7	222.7	240.1	261.7	266.6	269.0
7590B27	151.6	175.4	188.2	196.4	216.4	228.8	224.7	244.5	241.9	243.0
7566B28	155.7	176.7	180.6	177.9	194.1	204.7	212.0	226.3	227.2	246.1
MEAN	149.0	169.9	188.1	200.5	210.8	224.4	236.7	248.6	254.9	263.1
S.D.	6.09	9.72	10.13	11.42	14.22	14.67	16.17	17.34	18.48	17.93
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F0 ADULT FEMALES GROUP: 300.0 PPM

WEEK 10

ANIMAL	
7621B01	240.0
7509B02	267.5
7532B03	234.8
7508B04	293.5
7538B05	271.7
7579B06	259.5
7537B07	275.8
7574B08	268.3
7627B09	244.7
7561B10	280.4
7608B11	243.3
7564B12	254.7
7630B13	273.5
7518B14	263.0
7585B15	260.3
7642B16	293.4
7600B17	299.3
7603B18	289.0
7520B19	265.1
7541B20	301.9
7623B21	262.2
7631B22	278.4
7578B23	268.8
7527B24	288.8
7524B25	284.7
7552B26	281.4
7590B27	252.0
7566B28	262.7
MEAN	270.0
S.D.	17.97
N	28



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)										
FO ADULT FEMALES GROUP: 1000.0 PPM										
WEEK	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7550C01	138.5	159.9	178.2	187.2	197.1	209.9	221.9	229.3	232.0	238.2
7588C02	142.4	163.8	176.0	189.4	201.9	206.4	216.6	229.4	238.1	242.5
7556C03	146.7	173.4	184.5	204.3	225.5	241.0	245.0	263.4	274.2	275.3
7633C04	144.5	172.0	188.9	206.2	212.6	218.0	229.0	241.5	245.4	246.6
7533C05	148.6	168.2	179.7	190.8	205.3	219.0	220.6	235.4	248.8	246.5
7504C06	144.5	167.2	180.3	191.2	203.9	214.1	222.3	237.0	255.6	250.7
7582C07	146.3	165.4	186.3	194.8	209.2	222.7	231.5	244.0	247.1	239.2
7624C08	146.5	164.1	187.6	193.9	216.5	224.8	241.0	262.2	256.4	278.8
7542C09	143.5	170.0	179.0	191.4	205.1	213.0	217.0	225.0	235.1	235.5
7543C10	145.0	161.9	181.7	185.7	199.5	196.5	204.7	213.9	211.5	224.4
7572C11	145.8	171.8	184.8	197.5	217.0	225.6	237.0	243.9	248.7	257.7
7573C12	145.1	165.1	174.8	192.9	205.7	212.2	212.8	226.6	224.7	238.3
7616C13	149.8	177.0	196.9	216.3	249.4	255.9	265.4	282.1	284.1	295.8
7540C14	144.4	183.4	205.5	209.6	214.7	238.6	251.7	262.0	265.3	273.1
7617C15	148.9	176.3	198.4	217.2	232.5	242.8	252.8	283.9	288.5	283.6
7565C16	153.9	175.4	205.8	223.5	239.0	263.0	275.3	289.0	294.6	311.5
7516C17	143.1	173.7	186.8	209.9	218.4	236.0	237.1	251.8	255.9	265.2
7625C18	153.4	175.7	202.7	215.5	227.9	238.4	260.8	282.4	292.4	294.7
7626C19	150.7	181.5	200.1	221.9	228.4	240.7	245.9	264.1	269.9	279.2
7559C20	149.9	169.1	188.5	198.5	211.5	218.7	223.7	233.5	241.8	247.4
7546C21	147.8	170.3	183.3	199.3	207.6	216.5	222.8	240.5	246.8	251.3
7571C22	154.3	178.8	195.0	200.4	220.1	241.3	247.5	244.5	258.6	268.2
7606C23	150.7	167.5	180.2	198.9	218.6	227.1	231.9	241.7	249.2	258.0
7498C24	150.8	184.3	201.2	211.9	233.3	238.2	245.0	252.7	260.6	278.5
7615C25	154.7	178.7	187.6	203.9	210.6	218.8	222.8	246.6	247.9	246.4
7612C26	150.9	179.4	200.8	228.0	219.8	234.5	245.3	266.3	264.1	262.9
7589C27	157.3	188.0	197.0	210.7	212.7	228.1	234.9	244.4	246.9	252.2
7502C28	154.4	182.3	196.6	211.8	225.2	234.0	238.7	250.1	260.3	261.5
MEAN	148.3	173.0	189.6	203.7	216.7	227.7	235.7	249.5	255.2	260.8
S.D.	4.49	7.37	9.46	11.78	12.50	15.13	16.70	19.29	19.66	20.84
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 1000.0 PPM

WEEK 10

ANIMAL	
7550C01	234.1
7588C02	238.3
7556C03	273.3
7633C04	250.6
7533C05	249.2
7504C06	251.6
7582C07	245.0
7624C08	276.6
7542C09	234.6
7543C10	225.9
7572C11	265.5
7573C12	246.5
7616C13	292.8
7540C14	283.6
7617C15	290.2
7565C16	321.9
7516C17	264.6
7625C18	300.0
7626C19	279.0
7559C20	250.6
7546C21	247.5
7571C22	270.4
7606C23	256.5
7498C24	287.1
7615C25	243.4
7612C26	291.9
7589C27	258.5
7502C28	262.6
MEAN	264.0
S.D.	23.13
N	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)										
FO ADULT FEMALES GROUP: 2000.0 PPM										
WEEK	0	1	2	3	4	5	6	7	8	9
ANIMAL										
7495D01	144.4	159.2	160.7	171.9	183.9	188.6	199.4	211.2	221.9	227.0
7539D02	144.7	162.7	174.5	191.3	202.5	211.7	219.6	233.5	237.6	241.3
7519D03	142.7	164.7	177.2	189.0	206.9	216.8	225.5	231.1	240.6	248.0
7515D04	145.0	155.0	175.7	184.1	204.6	218.7	226.3	229.9	245.4	252.9
7568D05	141.9	180.8	195.7	204.3	210.4	216.8	223.6	230.4	240.4	240.2
7636D06	138.9	153.4	170.1	175.0	183.8	186.9	200.5	210.7	219.6	216.2
7545D07	155.5	175.9	199.3	209.3	212.6	219.5	238.5	250.0	258.6	263.0
7575D08	140.3	160.7	173.0	184.4	189.7	201.7	211.5	206.2	225.6	220.6
7584D09	149.5	158.8	181.8	196.7	204.8	209.8	213.7	230.9	244.6	245.2
7610D10	146.9	166.3	175.1	181.2	196.3	205.2	210.8	219.2	230.8	240.3
7536D11	141.3	164.3	171.5	186.1	199.8	202.0	200.6	213.6	227.3	224.4
7591D12	150.6	171.9	192.7	203.8	214.7	210.2	232.1	250.3	256.2	262.2
7554D13	151.9	173.2	185.1	199.2	207.9	222.0	225.1	238.9	254.5	257.6
7557D14	155.6	173.4	185.6	200.5	203.5	221.5	228.4	234.3	272.4	265.8
7548D15	146.4	169.8	187.4	200.3	216.1	219.5	223.8	242.4	250.1	252.3
7569D16	147.6	164.7	179.9	191.9	200.7	206.9	221.3	232.0	239.4	240.8
7567D17	153.9	177.9	188.1	199.9	211.3	224.2	232.5	220.3	242.2	250.9
7632D18	155.2	175.8	183.8	197.8	201.7	213.6	222.1	231.0	235.0	240.6
7528D19	144.7	162.4	175.8	189.9	199.3	199.8	215.8	224.0	232.1	237.6
7547D20	148.6	175.8	188.5	203.4	210.5	223.6	237.5	240.5	247.6	255.1
7549D21	148.4	177.4	198.4	205.1	216.8	220.2	237.9	249.1	263.5	268.6
7583D22	151.9	181.6	186.4	208.1	223.0	217.1	239.0	243.4	257.2	263.7
7523D23	157.0	164.9	185.7	196.7	202.0	199.4	220.9	238.3	246.5	248.5
7544D24	158.9	189.8	208.9	212.3	224.0	240.5	253.3	261.7	264.7	274.7
7637D25	160.6	180.6	193.4	217.2	224.8	224.5	227.6	246.7	252.7	255.5
7594D26	154.9	174.1	179.4	195.3	207.5	206.7	216.8	240.1	245.1	250.4
7596D27	158.7	168.3	184.5	195.5	200.2	197.9	214.6	227.2	237.9	237.9
7510D28	159.5	184.9	201.6	208.1	219.9	221.3	220.2	238.8	244.8	246.7
MEAN	149.8	170.3	184.3	196.4	206.4	212.4	222.8	233.1	244.1	247.4
S.D.	6.37	9.25	10.78	10.97	10.73	11.89	12.49	13.36	13.08	14.43
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 2000.0 PPM

WEEK	10
ANIMAL	
7495D01	222.1
7539D02	246.7
7519D03	252.9
7515D04	259.8
7568D05	247.7
7636D06	222.4
7545D07	272.7
7575D08	223.4
7584D09	244.8
7610D10	239.4
7536D11	223.5
7591D12	272.1
7554D13	252.3
7557D14	204.0
7548D15	254.8
7569D16	249.3
7567D17	252.0
7632D18	248.9
7528D19	234.9
7547D20	257.7
7549D21	270.9
7583D22	257.4
7523D23	255.1
7544D24	283.0
7637D25	255.2
7594D26	250.5
7596D27	245.7
7510D28	243.6
MEAN	248.0
S.D.	17.45
N	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7529A01	15.7	16.1	15.8	15.6	15.1	15.1	17.4	17.0	17.8	16.6
7634A02	17.7	18.3	18.8	19.0	19.0	18.7	18.7	20.2	20.1	20.3
7505A03	18.0	17.3	18.5	18.6	17.8	19.3	21.0	21.6	21.7	18.3
7513A04	15.8	15.2	15.9	16.3	16.8	16.8	15.9	17.4	18.4	16.6
7517A05	16.2	17.0	15.8	16.2	15.6	16.3	16.9	16.8	16.6	16.3
7601A06	16.5	17.3	17.2	18.0	16.5	18.2	20.9	20.6	20.0	19.3
7503A07	18.0	17.9	18.6	19.4	16.9	17.5	18.4	18.8	18.1	16.8
7611A08	16.3	16.4	16.1	15.2	15.6	16.3	16.8	15.7	16.0	16.0
7605A09	17.7	18.3	17.7	18.2	18.6	20.8	20.7	19.3	19.9	18.5
7593A10	15.6	15.1	15.6	15.9	16.1	17.6	16.5	18.1	19.0	17.9
7512A11	17.5	17.6	18.4	17.5	16.9	19.1	20.3	19.6	18.9	18.3
7638A12	17.6	16.5	16.6	16.5	15.9	15.7	15.7	16.9	16.7	17.1
7628A13	18.4	20.6	16.9	18.9	19.9	19.6	18.0	17.7	18.9	17.1
7639A14	19.2	19.2	19.0	19.4	18.7	19.7	18.0	19.1	19.4	18.6
7618A15	17.6	19.4	18.8	19.1	17.6	19.5	17.1	18.4	19.0	17.7
7555A16	16.5	17.7	17.4	18.4	17.6	19.8	18.9	18.0	18.3	18.4
7609A17	17.9	18.6	18.7	19.5	18.2	19.1	19.1	19.2	20.0	18.7
7643A18	16.6	16.5	17.1	16.7	16.7	18.0	18.1	19.5	17.4	17.1
7635A19	17.8	18.5	18.9	18.5	17.8	18.5	18.6	17.6	18.0	17.8
7629A20	19.3	18.4	18.3	17.4	16.9	17.0	16.4	16.9	16.5	16.5
7620A21	18.6	17.8	17.8	19.2	20.0	20.7	22.1	24.4	21.3	21.2
7511A22	16.8	17.7	16.8	17.5	r/s	18.7	20.3	19.4	21.1	r/s
7619A23	20.6	20.1	21.3	21.5	20.6	21.1	23.1	22.6	19.7	21.1
7522A24	19.0	18.7	18.1	18.6	18.9	19.4	20.1	18.6	18.1	18.3
7563A25	17.2	18.1	17.5	17.9	18.3	19.9	18.6	19.3	19.5	17.9
7586A26	19.1	16.8	17.2	16.9	16.8	19.0	18.1	17.7	18.7	18.6
7531A27	17.9	19.6	17.6	18.6	18.2	18.4	20.7	18.9	18.7	17.9
7598A28	15.3	16.2	17.2	16.8	16.5	17.8	17.9	16.9	17.2	17.1
MEAN	17.5	17.7	17.6	17.9	17.5	18.5	18.7	18.8	18.8	18.0
S.D.	1.28	1.36	1.26	1.44	1.42	1.53	1.88	1.88	1.45	1.34
N	28	28	28	28	27	28	28	28	28	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT FEMALES GROUP: 300.0 PPM

WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7621B01	15.5	16.6	17.2	17.5	18.4	18.9	19.2	20.2	20.6	18.9
7509B02	16.2	16.3	17.5	16.4	17.4	19.2	19.0	19.3	19.4	17.9
7532B03	17.7	r/s	17.5	17.5	18.2	18.3	17.1	18.7	18.9	17.5
7508B04	17.3	18.1	18.3	18.9	20.2	21.8	22.4	21.6	20.7	18.9
7538B05	15.6	16.8	18.2	16.4	17.3	18.7	19.3	19.0	17.9	19.0
7579B06	16.4	16.1	16.4	15.3	16.3	19.0	17.4	19.3	18.3	17.3
7537B07	17.6	17.3	16.7	17.3	17.8	18.8	17.1	17.4	18.4	17.2
7574B08	15.6	17.1	16.7	17.0	17.9	20.0	19.2	18.4	18.3	19.4
7627B09	15.5	16.6	16.7	16.0	16.9	15.8	17.3	17.3	19.0	17.9
7561B10	17.5	19.4	17.9	18.2	19.2	20.7	19.0	18.5	19.5	19.2
7608B11	15.9	16.1	16.8	16.4	16.6	17.8	16.6	18.2	15.8	17.1
7564B12	17.0	17.6	15.4	16.0	18.3	17.4	21.2	18.2	19.9	18.8
7630B13	18.3	19.0	18.9	17.8	20.2	19.5	18.8	18.9	20.5	20.4
7518B14	16.2	15.1	16.3	18.5	18.6	18.6	17.9	17.8	17.3	16.7
7585B15	17.1	16.6	17.2	17.7	18.8	18.7	19.7	18.6	18.7	19.5
7642B16	18.1	19.1	19.2	19.2	19.4	20.5	20.0	20.5	19.6	20.2
7600B17	17.4	17.6	18.3	18.5	18.7	19.2	19.2	19.5	18.7	18.5
7603B18	18.1	18.8	18.0	18.0	19.4	21.5	21.2	20.0	20.6	18.9
7520B19	18.9	14.4	16.0	16.2	18.2	17.9	16.7	17.8	18.6	17.1
7541B20	18.1	18.9	19.8	19.1	22.2	21.8	20.7	20.2	20.5	20.9
7623B21	18.1	17.4	16.2	16.9	18.4	19.2	18.8	19.8	r/s	18.5
7631B22	17.5	18.2	16.9	18.7	19.1	18.8	19.4	18.0	18.8	17.3
7578B23	17.9	19.2	19.9	19.1	18.7	18.3	19.4	19.0	16.9	17.0
7527B24	17.2	18.9	17.7	17.3	19.1	21.4	19.9	19.6	18.0	18.2
7524B25	17.7	18.6	19.1	19.0	19.4	19.9	19.9	19.8	18.5	18.0
7552B26	16.1	17.9	16.5	16.6	18.8	20.9	20.1	19.7	19.0	18.8
7590B27	18.3	19.8	17.8	19.8	20.7	20.7	21.6	19.8	19.0	20.8
7566B28	18.8	14.5	13.8	17.4	17.3	18.5	18.8	17.7	19.0	20.9
MEAN	17.2	17.5	17.4	17.6	18.6	19.4	19.2	19.0	18.9	18.6
S.D.	1.03	1.49	1.35	1.20	1.28	1.43	1.48	1.05	1.17	1.24
N	28	27	28	28	28	28	28	28	27	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

FO ADULT FEMALES GROUP: 1000.0 PPM

WEEK	1	2	3	4	5	6	7	8	9	10
ANIMAL										
7550C01	18.9	16.1	15.7	16.0	16.4	16.6	16.2	16.5	16.7	16.2
7588C02	15.4	15.1	15.1	14.3	14.7	15.9	15.9	16.1	15.3	15.6
7556C03	17.8	18.2	18.6	19.1	20.1	20.9	20.4	19.2	18.3	17.8
7633C04	16.5	16.0	15.8	16.2	16.6	19.8	17.6	16.8	16.7	16.8
7533C05	17.4	16.9	17.4	17.0	17.6	17.5	17.6	17.4	17.2	17.6
7504C06	17.1	17.1	16.6	16.6	17.8	18.4	19.0	18.4	20.1	16.5
7582C07	16.6	17.7	16.1	16.3	18.1	19.6	17.7	17.6	15.4	15.6
7624C08	15.7	17.0	16.3	17.8	18.5	19.0	20.2	18.2	19.8	19.4
7542C09	17.0	15.9	16.8	17.3	17.4	18.0	17.7	17.9	17.2	16.8
7543C10	17.3	17.7	16.8	17.6	16.7	16.6	17.6	15.8	17.4	16.6
7572C11	18.2	19.1	17.6	20.5	21.0	20.0	20.2	21.3	21.2	19.8
7573C12	14.3	12.7	13.9	14.5	14.4	13.4	16.9	r/s	17.9	18.1
7616C13	16.5	17.6	17.2	20.0	18.0	18.3	19.4	18.7	18.8	18.6
7540C14	18.0	17.9	14.7	16.3	17.9	18.3	18.5	18.8	18.6	17.5
7617C15	16.6	17.9	17.3	17.3	17.4	17.8	21.8	20.6	16.5	17.4
7565C16	17.2	19.7	18.5	20.2	21.6	20.6	20.7	19.8	20.8	19.4
7516C17	16.7	16.4	16.5	16.8	17.0	15.9	18.0	17.2	17.8	15.6
7625C18	18.2	19.9	17.2	17.5	19.3	21.1	21.7	20.4	19.0	17.5
7626C19	17.7	18.5	18.4	17.9	18.1	18.3	18.9	18.1	17.9	17.8
7559C20	17.0	17.2	18.1	16.9	18.1	17.3	18.2	17.6	18.9	18.0
7546C21	16.5	17.0	16.8	16.4	17.7	18.1	19.1	18.7	17.0	17.7
7571C22	17.1	17.2	16.8	17.8	18.6	22.3	21.5	19.5	18.4	17.8
7606C23	17.0	17.9	19.1	20.0	18.7	19.1	19.6	19.0	19.4	18.2
7498C24	17.4	17.4	16.7	18.6	17.0	18.0	18.3	18.6	18.8	18.9
7615C25	16.8	16.4	16.2	17.3	16.7	16.9	17.7	17.2	15.7	15.9
7612C26	16.1	16.0	17.6	14.9	16.2	16.5	17.6	16.7	16.1	19.3
7589C27	17.8	16.5	16.2	15.5	17.1	16.9	17.0	17.9	17.5	16.1
7502C28	17.5	17.7	17.3	18.1	18.0	18.3	19.4	18.5	16.8	18.2
MEAN	17.0	17.2	16.8	17.3	17.7	18.2	18.7	18.2	17.9	17.5
S.D.	0.94	1.42	1.18	1.63	1.57	1.87	1.60	1.36	1.54	1.23
N	28	28	28	28	28	28	28	27	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

WEEK	1	2	3	4	5	6	7	8	9	10
FO ADULT FEMALES GROUP:	2000.0 PPM									
ANIMAL									r/s	
7495D01	16.3	15.7	15.2	15.8	15.0	17.3	19.9	19.1		16.8
7539D02	14.2	16.1	18.0	16.7	17.1	18.0	18.2	17.2	16.2	17.1
7519D03	15.6	17.3	17.4	18.6	18.1	18.6	18.7	19.2	18.4	18.9
7515D04	15.2	16.7	19.0	19.7	22.8	20.4	r/s	r/s	20.3	20.5
7568D05	16.0	15.5	15.3	14.9	15.1	16.0	15.4	16.8	15.8	15.0
7636D06	14.5	14.5	13.5	14.0	17.6	15.6	16.0	17.3	16.0	15.8
7545D07	16.8	18.1	16.5	15.5	17.3	19.1	17.9	19.4	20.0	19.3
7575D08	15.1	15.2	14.8	15.2	16.1	16.3	17.2	17.1	15.5	14.7
7584D09	13.9	16.6	16.3	15.4	15.1	16.0	17.7	17.5	17.1	17.0
7610D10	14.6	15.2	15.0	16.1	16.6	16.7	17.9	19.3	18.4	16.9
7536D11	13.9	15.4	14.7	14.8	14.8	15.1	15.2	16.0	15.6	14.9
7591D12	16.2	18.2	17.3	16.9	16.4	18.5	18.6	19.2	19.2	18.6
7554D13	17.7	17.0	17.3	18.1	18.3	19.0	19.2	20.5	19.5	18.2
7557D14	17.1	18.0	18.3	19.7	22.3	r/s	20.7	25.1	22.7	10.3
7548D15	14.9	14.4	16.0	16.6	16.4	16.8	17.1	17.0	16.7	16.6
7569D16	14.7	16.6	15.4	15.1	16.0	17.4	16.3	17.5	17.4	17.5
7567D17	17.6	16.5	16.4	17.4	17.3	17.6	15.8	19.7	17.4	18.4
7632D18	16.5	16.4	15.6	16.2	16.5	17.2	16.9	18.2	17.5	16.4
7528D19	14.4	15.6	15.2	15.4	15.5	16.0	15.5	17.1	r/s	20.4
7547D20	16.0	17.0	16.1	16.6	16.9	16.5	17.1	17.8	17.6	15.8
7549D21	16.3	17.3	15.4	17.1	16.2	18.2	17.6	19.3	18.2	17.0
7583D22	17.7	15.9	16.7	17.2	15.2	17.4	r/s	17.3	17.6	16.0
7523D23	16.1	17.5	15.9	19.6	17.7	18.1	19.1	19.2	20.3	18.3
7544D24	17.3	19.7	18.2	17.8	21.0	19.2	r/s	18.5	18.7	17.5
7637D25	16.3	17.5	17.8	17.8	16.0	17.1	18.2	18.6	16.6	16.5
7594D26	15.5	17.0	14.1	16.0	14.9	16.6	18.2	19.1	17.8	17.9
7596D27	16.6	17.8	17.9	17.2	16.6	18.4	18.5	20.3	18.6	19.4
7510D28	18.5	19.1	18.5	19.1	18.5	18.5	19.6	19.8	18.8	18.9
MEAN	15.9	16.7	16.4	16.8	17.1	17.5	17.7	18.6	18.0	17.2
S.D.	1.25	1.30	1.44	1.56	2.07	1.27	1.45	1.75	1.69	2.05
N	28	28	28	28	28	27	25	27	26	28



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
0.0 PPM					
	21338	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21339	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21340	NORMAL	99	-21- 93	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	14	94-107	PERINASAL ENCRUSTATION
		SKIN	12	107-118	CRUST (NSE 12)
	21341	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21342	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21343	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	-15	PERIOULAR ENCRUSTATION (EYL 1)
	21344	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21345	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21346	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21347	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21348	NORMAL	67	-21- 97	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	38	23-118	PERIOULAR ENCRUSTATION (EYR 38)
			18	41- 62	REDDENED EYES (EYR 18)
			1	40	OCULAR DISCHARGE (EYR 1)
		ORAL/DENTAL	2	26- 51	OVERGROWN INCISORS
	21349	NORMAL	109	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		ORAL/DENTAL	14	28- 41	MALOCCLUSION
	21350	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21351	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21352	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21353	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21354	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21355	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
0.0 PPM	21355	DEAD	1	117	SCHEDULED SACRIFICE
	21356	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21357	NORMAL	92	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	31	26- 84	ALOPECIA (LFB 31)
	21358	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21359	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21360	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21361	NORMAL	123	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	14	PERINASAL ENCRUSTATION
	21362	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21363	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21364	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
300.0 PPM	21365	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21366	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21367	NORMAL	20	-21- 14	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		BODY	1	15	TRAUMATIZED (MTH 1)
		EYES/EARS/NOSE	65	15-118	PERIOULAR ENCRUSTATION (EYL 65)
			1	15	PERINASAL ENCRUSTATION
		ORAL/DENTAL	104	15-118	MALOCCLUSION
			4	20-109	OVERGROWN INCISORS
			11	15- 25	BROKEN INCISOR
			5	15- 19	ORAL LESION
	21368	NORMAL	114	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	5	96-118	PERINASAL ENCRUSTATION
		SKIN	5	91- 95	EXCORIATED (EAR 5)
	21369	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21370	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
300.0 PPM	21371	NORMAL	89	-21-104	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	34	68-117	ALOPECIA (LFB 27, LFL 7)
	21372	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21373	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21374	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21375	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21376	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21377	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21378	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21379	NORMAL	123	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	3	-12- -2	OCULAR DISCHARGE (EYB 1, EYR 2)
			2	-13- -6	PERIOULAR ENCRUSTATION (EYB 2)
	21380	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21381	NORMAL	26	-21- 20	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		BODY	5	21- 25	SWELLING (NSE 5)
		EYES/EARS/NOSE	97	21-118	PERIOULAR ENCRUSTATION (EYB 47, EYL 50)
			1	83	LACRIMATION (EYR 1)
			1	54	REDDENED EYES (EYL 1)
			2	21- 22	PERINASAL ENCRUSTATION
		ORAL/DENTAL	7	21- 98	OVERGROWN INCISORS
			14	21- 34	MALOCCLUSION
			4	22- 25	BROKEN INCISOR
	21382	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21383	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21384	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21385	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21386	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
300.0 PPM	21387	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21388	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21389	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21390	NORMAL	122	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EXCRETA	1	49	LOOSE FECES
	21391	NORMAL	122	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	106	OCULAR DISCHARGE (EVR 1)
1000.0 PPM	21392	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21393	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21394	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21395	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21396	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21397	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21398	NORMAL	81	-21- 75	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	37	76-117	PERIOcular ENCRUSTATION (EVB 4, EVR 33)
		ORAL/DENTAL	42	76-117	MALOCCLUSION
			3	93-109	OVERGROWN INCISORS
			4	76- 79	ORAL LESION
	21399	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21400	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21401	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21402	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21403	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21404	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
1000.0 PPM					
	21405	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21406	NORMAL	121	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	98	PERINASAL ENCRUSTATION
			2	80- 81	PERIOULAR ENCRUSTATION (EYL 2)
	21407	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21408	NORMAL	118	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	6	72- 92	PERIOULAR ENCRUSTATION (EYL 6)
	21409	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21410	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21411	NORMAL	122	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		ORAL/DENTAL	1	98	MALOCCLUSION
			1	98	OVERGROWN INCISORS
	21412	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21413	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21414	NORMAL	28	-21- 22	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		BODY	4	89- 92	UNKEMPT
			3	23- 25	SWELLING (NSE 3)
		EYES/EARS/NOSE	3	81- 83	PERINASAL ENCRUSTATION
			38	23- 83	PERIOULAR ENCRUSTATION (EYB 2, EYR 36)
			1	81	LACRIMATION (EYR 1)
			6	44- 49	REDDED EYES (EYR 6)
		ORAL/DENTAL	37	82-118	MISSING INCISOR
			4	48- 98	OVERGROWN INCISORS
			11	26- 84	ORAL LESION
			59	23- 81	MALOCCLUSION
			3	23- 25	BROKEN INCISOR
	21415	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21416	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21417	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21418	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
1000.0 PPM	21418	DEAD	1	117	SCHEDULED SACRIFICE
	21419	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21420	NORMAL	122	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	19	PERINASAL ENCRUSTATION
2000.0 PPM	21421	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21422	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21423	NORMAL	21	-21- 15	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		BODY	6	28- 33	URINE STAINS
			7	26- 32	UNKEMPT
		EYES/EARS/NOSE	100	18-117	PERIOULAR ENCRUSTATION (EYB 89, EYR 11)
			2	53- 54	LACRIMATION (EYB 1, EYR 1)
			1	26	PERINASAL ENCRUSTATION
			2	16- 17	OCULAR DISCHARGE (EYR 2)
		EXCRETA	4	106-110	LOOSE FECES
		ORAL/DENTAL	11	22- 98	OVERGROWN INCISORS
	21424	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21425	NORMAL	47	-21- 41	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		BODY	11	42- 56	URINE STAINS
			7	42- 48	TRAUMATIZED (MTH 7)
			2	42- 43	SWELLING (NSE 2)
		EYES/EARS/NOSE	76	42-117	PERIOULAR ENCRUSTATION (EYB 42, EYR 34)
			1	51	REDDENED EYES (EYL 1)
			3	42- 44	PERINASAL ENCRUSTATION
		EXCRETA	1	51	LOOSE FECES
		ORAL/DENTAL	8	48-109	OVERGROWN INCISORS
	21426	NORMAL	72	-21-104	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		SKIN	52	42-118	ALOPECIA (LFB 49, LFR 3)
	21427	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21428	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	-15	PERIOULAR ENCRUSTATION (EYR 1)
	21429	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
2000.0 PPM					
	21430	NORMAL	109	-21-103	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		BODY	7	104-110	SWELLING (NSE 7)
		EYES/EARS/NOSE	13	104-116	PERIOCLAR ENCRUSTATION (EVR 13)
		ORAL/DENTAL	14	104-117	MALOCCLUSION
			1	109	OVERGROWN INCISORS
	21431	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21432	NORMAL	121	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EXCRETA	3	111-113	LOOSE FECES
	21433	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21434	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21435	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21436	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21437	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21438	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21439	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21440	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21441	NORMAL	118	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EXCRETA	5	108-112	LOOSE FECES
	21442	NORMAL	120	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	3	49- 51	ALOPECIA (LFB 1, LFL 2)
	21443	NORMAL	120	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	2	57- 58	PERIOCLAR ENCRUSTATION (EVR 2)
		EXCRETA	2	111-112	LOOSE FECES
	21444	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21445	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21446	NORMAL	63	-21- 57	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT MALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
2000.0 PPM	21446	EYES/EARS/NOSE	60	58-117	PERIOULAR ENCRUSTATION (EVR 60)
		ORAL/DENTAL	60	58-117	MALOCCLUSION
	21447	NORMAL	2	93- 98	OVERGROWN INCISORS
			124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	21448	NORMAL	1	118	SCHEDULED SACRIFICE
			124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
	21449	NORMAL	1	118	SCHEDULED SACRIFICE
			40	-21- 34	NO SIGNIFICANT CLINICAL OBSERVATIONS
	21449	DEAD	1	50	SACRIFICED MORIBUND
			1	50	ATAXIA
			1	50	HYPOACTIVE
		BEHAVIOR/CNS	6	45- 50	URINE STAINS
			4	47- 50	EMACIATED
			4	47- 50	DEHYDRATED
		BODY	1	50	COLD EXTREMITIES (LAL 1)
			1	44	UROGENITAL AREA WETNESS
			2	35- 36	TRAUMATIZED (MTH 2)
		EYES/EARS/NOSE	2	35- 36	SWELLING (NSE 2)
			17	35- 50	PERIOULAR ENCRUSTATION (EVB 4, EVL 13)
			1	35	PERINASAL ENCRUSTATION
		ORAL/DENTAL	13	35- 50	ORAL LESION
			13	35- 50	MALOCCLUSION
			3	37- 50	OVERGROWN INCISORS



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP:					0.0 PPM				
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21338	111.5	173.0	233.0	292.0	348.1	396.1	417.3	467.4	496.0	518.8
21339	102.5	158.2	211.6	265.6	309.3	343.7	378.8	402.5	426.1	452.4
21340	109.3	170.9	228.6	289.6	333.9	373.6	402.9	434.8	449.1	473.9
21341	101.1	152.9	200.5	253.8	296.7	342.8	365.4	384.6	408.1	432.4
21342	98.2	158.2	214.8	271.2	314.9	351.7	378.2	404.4	431.1	451.5
21343	109.7	165.1	219.4	274.4	326.2	375.6	415.4	445.5	471.8	491.1
21344	104.2	168.0	223.1	280.7	328.4	380.5	414.9	446.7	457.7	486.9
21345	104.8	156.6	205.4	254.1	294.1	327.8	353.2	376.8	397.8	414.9
21346	103.8	162.1	217.9	273.6	316.0	351.9	388.0	410.1	420.2	442.0
21347	102.5	156.1	204.4	254.2	301.2	339.0	369.7	399.9	424.0	444.6
21348	102.4	155.1	200.3	248.9	287.9	326.1	350.3	347.1	361.7	385.3
21349	117.9	178.3	232.8	290.2	336.2	377.8	410.2	424.3	451.8	468.3
21350	126.9	187.9	244.1	301.2	352.0	393.1	425.8	451.1	473.1	492.0
21351	119.8	178.3	227.9	277.9	316.7	357.5	384.9	404.5	423.8	444.6
21352	119.3	173.6	224.2	285.5	331.0	363.9	382.3	402.2	411.8	432.3
21353	130.5	195.9	254.4	314.0	359.1	398.2	429.6	456.9	467.4	489.4
21354	122.8	183.1	238.2	288.9	334.8	370.8	402.2	429.4	452.1	469.3
21355	129.0	191.4	255.3	312.2	364.6	402.6	439.0	466.5	484.0	497.1
21356	106.5	162.5	211.9	251.6	295.6	331.3	359.8	386.2	404.2	423.3
21357	99.2	157.4	210.9	265.9	312.6	345.4	376.3	396.9	418.0	435.9
21358	133.4	210.5	274.1	344.6	395.4	430.5	460.5	494.6	520.6	546.2
21359	137.7	201.9	256.4	311.2	362.2	402.5	441.7	465.1	488.3	513.4
21360	111.7	169.0	220.7	271.6	324.3	361.5	390.9	421.9	440.8	463.1
21361	102.4	161.3	218.8	274.3	328.0	361.9	399.4	428.9	451.9	474.7
21362	109.9	175.8	227.3	279.8	325.3	359.4	389.0	409.5	435.4	458.6
21363	120.0	177.4	226.4	281.4	321.4	352.2	378.3	398.3	420.9	438.2
21364	130.2	192.6	256.9	321.5	380.4	428.0	469.7	498.8	534.0	555.1
21365	107.2	162.6	214.0	255.9	302.2	339.4	365.1	389.4	410.0	433.6
MEAN	113.4	172.7	226.9	281.6	328.5	367.3	397.8	423.0	444.0	465.3
S.D.	11.66	15.43	18.97	23.52	26.64	28.37	31.33	36.16	38.46	38.82
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD-1)  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP:					0.0 PPM				
	7	8	9	10	11	12	13	14	15	16
ANIMAL										
21338	541.4	559.5	572.9	585.7	592.9	613.6	620.2	630.6	641.0	647.9
21339	469.9	489.6	498.5	505.6	506.3	513.6	527.8	535.1	542.3	562.2
21340	493.0	506.4	517.5	528.2	529.8	543.5	554.8	559.0	465.7	579.1
21341	450.0	471.6	481.6	489.4	494.0	498.7	505.9	515.7	522.7	526.8
21342	471.0	480.0	491.6	503.6	507.1	523.0	528.2	526.2	529.7	525.6
21343	519.3	529.5	553.0	560.2	553.9	570.8	576.1	580.5	598.5	604.7
21344	504.9	517.8	535.0	544.8	545.5	564.9	572.2	583.8	592.8	607.8
21345	431.3	449.7	472.6	478.6	485.3	498.5	504.6	505.6	507.5	512.2
21346	462.3	471.6	491.2	494.3	504.3	518.5	526.1	524.0	529.1	539.7
21347	465.9	481.4	500.4	510.3	510.5	520.1	532.5	535.3	544.1	549.7
21348	394.6	412.4	416.8	425.6	437.0	444.3	452.9	451.6	452.7	461.5
21349	486.9	489.4	504.7	511.4	521.7	537.0	547.5	544.7	553.1	560.3
21350	515.7	532.2	546.0	556.9	560.3	575.2	582.1	587.8	597.6	606.5
21351	462.0	474.0	489.8	501.4	503.5	511.6	523.4	524.9	529.9	539.4
21352	457.8	459.6	474.5	487.4	484.4	493.9	505.8	511.8	522.9	523.6
21353	513.7	517.3	534.9	541.1	541.0	556.7	572.6	581.3	606.8	613.3
21354	487.4	505.9	521.0	530.4	543.9	535.9	534.2	538.4	555.3	555.0
21355	517.0	528.0	539.7	549.3	511.2	551.1	571.0	581.2	593.3	595.8
21356	437.4	445.0	457.5	463.7	468.9	478.7		481.7	495.7	501.5
21357	447.6	461.8	480.1	482.8	495.2			512.3	523.9	534.7
21358	572.7	589.8	616.7	631.9	629.5			669.4	682.3	692.2
21359	531.1	545.4	562.3	576.4	572.7			604.6	618.6	628.2
21360	483.3	501.6	518.9	521.5	530.6			546.5	559.5	578.2
21361	489.1	512.2	520.3	531.2	536.8			576.1	574.6	576.4
21362	478.1	486.0	514.9	518.7	514.5			527.2	541.0	554.3
21363	466.1	472.8	478.4	488.2	489.7			503.3	509.0	523.4
21364	586.2	602.9	626.2	648.0	645.6			684.1	693.2	720.8
21365	439.3	454.0	471.4	485.4	490.4			505.0	518.9	535.4
MEAN	484.8	498.1	513.9	523.3	525.2			551.0	557.2	569.9
S.D.	42.47	43.18	45.73	48.05	45.61			52.88	57.54	56.81
N	28	28	28	28	28			28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F1 ADULT MALES GROUP: 0.0 PPM

WEEK 17

ANIMAL	
21338	654.1
21339	571.0
21340	585.7
21341	533.1
21342	539.3
21343	611.2
21344	621.2
21345	514.8
21346	544.3
21347	555.4
21348	472.0
21349	553.0
21350	610.5
21351	543.8
21352	531.5
21353	620.0
21354	562.0
21355	597.9
21356	503.8
21357	535.8
21358	711.8
21359	638.5
21360	599.1
21361	591.9
21362	560.2
21363	522.9
21364	736.0
21365	538.3
MEAN	577.1
S.D.	59.65
N	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP: 300.0 PPM									
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21366	129.3	186.7	236.8	282.4	318.5	353.3	384.9	407.0	425.3	439.7
21367	134.2	205.5	270.2	331.3	386.5	423.5	428.3	462.5	462.7	483.8
21368	91.0	148.6	205.6	253.9	303.8	340.5	369.3	390.0	408.2	426.7
21369	120.3	183.0	234.8	298.7	352.0	393.9	430.8	463.9	486.7	510.8
21370	107.3	164.4	218.1	275.0	320.2	361.9	391.3	419.1	438.2	463.7
21371	99.0	150.8	199.1	253.9	301.5	338.8	372.7	405.6	430.0	448.7
21372	120.7	179.3	229.5	277.5	319.8	356.7	386.9	408.0	430.0	451.1
21373	138.6	201.1	254.0	314.5	369.3	414.1	455.3	486.3	511.6	535.9
21374	125.5	183.9	235.0	289.3	336.0	360.3	394.3	418.3	440.0	454.1
21375	139.3	204.5	265.1	332.2	383.0	435.0	473.4	500.8	530.7	551.5
21376	105.4	167.4	223.4	279.9	321.2	359.3	390.8	425.1	446.7	462.8
21377	113.8	166.9	220.0	272.3	313.5	343.5	364.3	389.4	409.7	428.0
21378	125.4	187.9	234.5	294.4	337.6	380.7	416.5	442.1	464.2	488.3
21379	114.5	172.8	225.6	276.7	319.7	358.5	394.9	412.8	434.7	453.4
21380	116.3	173.5	222.0	275.8	318.0	357.8	387.5	412.0	432.6	448.3
21381	115.2	167.9	223.3	279.4	327.4	367.6	379.3	410.7	443.9	455.5
21382	110.9	173.8	231.4	292.4	350.1	402.5	447.2	483.8	504.9	531.2
21383	121.3	182.6	235.8	285.3	327.9	368.6	395.5	426.7	443.9	466.4
21384	129.4	186.4	236.2	285.6	329.4	370.0	399.1	424.7	448.4	470.1
21385	140.2	197.0	250.4	297.6	346.0	383.5	408.5	431.0	460.0	485.4
21386	114.4	180.4	243.1	303.0	362.2	407.0	447.7	479.3	508.0	529.5
21387	110.1	166.3	219.7	284.3	340.0	386.8	427.1	465.9	491.4	514.0
21388	120.1	180.4	233.8	286.2	333.5	366.9	396.2	418.0	431.2	446.6
21389	122.5	190.3	251.0	299.1	341.8	380.7	413.7	443.3	463.9	479.1
21390	121.3	193.6	254.6	319.2	377.4	429.5	472.2	504.5	537.5	567.0
21391	138.0	193.7	240.7	288.8	332.8	368.0	392.1	418.5	441.9	449.5
21392	135.1	194.6	241.0	291.5	336.6	373.5	400.0	420.5	440.6	461.6
21393	121.8	181.7	238.1	295.1	350.3	395.0	438.5	463.1	485.7	508.5
MEAN	120.7	180.9	234.8	289.8	337.7	377.8	409.2	436.9	459.0	479.0
S.D.	12.30	14.56	16.10	18.69	22.41	26.38	30.15	32.87	35.06	38.04
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP:					300.0 PPM				
	7	8	9	10	11	12	13	14	15	16
ANIMAL										
21366	454.3	458.0	475.2	482.1	477.5	484.7	494.3	504.5	513.8	512.8
21367	495.8	491.5	532.2	531.5	547.6	556.7	560.4	556.1	563.2	571.8
21368	443.7	453.6	464.8	466.8	462.0	480.4	466.3	478.8	487.1	495.9
21369	534.9	548.1	572.7	592.3	574.3	593.0	613.5	628.7	647.0	653.0
21370	486.5	499.1	509.7	520.9	515.2	528.0	537.5	549.9	561.9	571.0
21371	473.1	477.4	498.9	507.5	510.8	522.1	532.5	545.4	556.6	573.8
21372	468.0	475.6	483.5	500.2	497.9	499.3	505.8	519.4	534.5	537.4
21373	556.2	577.5	601.5	611.5	610.1	638.4	654.9	650.9	661.3	670.6
21374	469.0	478.9	492.1	509.9	510.0	522.9	523.5	514.2	529.9	538.6
21375	572.6	592.2	614.0	620.4	626.2	632.2	646.7	662.4	668.3	677.4
21376	493.3	509.3	523.7	539.9	547.5	558.3	563.7	581.3	602.8	616.6
21377	444.5	450.3	463.6	470.0	471.0	474.8	478.0	481.8	500.5	516.7
21378	515.3	527.8	544.2	555.1	554.3	572.3	582.0	584.0	605.7	615.3
21379	470.9	477.0	496.5	503.7	500.2	502.4	509.8	521.4	525.8	539.3
21380	463.1	472.8	487.9	496.1	499.3	509.7	519.5	518.6	523.8	534.2
21381	478.8	488.7	512.5	526.3	537.8	546.8	538.7	538.3	562.0	584.1
21382	559.4	578.3	603.5	621.0	614.1	639.5	649.3	649.0	669.0	691.3
21383	482.4	492.0	507.8	522.9	515.2	529.1	541.3	542.7	557.8	567.5
21384	488.4	498.2	521.6	532.0	533.9	548.7	556.0	570.0	577.6	594.3
21385	505.2	516.8	535.7	555.3	550.3	565.3	573.1	577.5	583.6	593.1
21386	548.9	563.5	583.6	597.9	606.4	612.1	627.6	623.7	629.6	646.5
21387	535.5	551.2	564.6	580.3	584.2	600.5	616.6	616.8	627.4	638.0
21388	460.6	471.8	473.8	476.6	471.1	484.1	493.5	498.8	508.7	518.7
21389	497.2	516.9	530.4	543.1	532.0	527.2	541.0	555.1	574.8	595.2
21390	598.9	625.7	651.3	665.2	663.3	668.6	667.9	683.2	699.8	716.2
21391	462.9	478.6	494.9	508.3	506.0	515.8	528.0	536.9	540.6	547.8
21392	477.9	493.3	508.8	519.2	518.7	534.5	519.0	541.1	523.3	526.7
21393	529.2	539.7	554.3	577.0	585.1	585.3	582.6	587.2	604.9	623.4
MEAN	498.8	510.8	528.7	540.5	540.1	551.2	558.0	564.9	576.5	588.1
S.D.	41.04	45.49	48.78	50.98	51.72	53.37	56.33	55.73	57.47	59.59
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F1 ADULT MALES GROUP: 300.0 PPM

WEEK 17

ANIMAL	WEIGHT (GRAMS)
21366	516.0
21367	592.9
21368	491.5
21369	664.7
21370	578.1
21371	580.9
21372	545.8
21373	674.4
21374	545.9
21375	682.8
21376	620.6
21377	524.6
21378	610.9
21379	548.4
21380	535.5
21381	596.9
21382	704.0
21383	576.4
21384	602.5
21385	601.2
21386	660.6
21387	650.7
21388	520.5
21389	604.3
21390	737.3
21391	548.9
21392	548.2
21393	632.1

MEAN	596.3
S.D.	62.06
N	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP: 1000.0 PPM									
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21394	119.0	177.0	231.2	284.5	334.4	369.6	403.9	434.6	461.3	473.7
21395	108.1	165.8	218.5	268.8	322.2	366.3	411.0	440.5	464.8	473.1
21396	94.7	151.1	205.3	265.7	321.6	358.0	398.5	425.0	456.0	482.7
21397	116.5	173.0	224.0	271.9	311.9	342.8	371.0	393.7	412.0	428.1
21398	108.4	158.0	209.8	263.4	316.4	345.8	395.6	416.5	438.9	463.0
21399	101.6	162.7	223.2	278.1	334.5	369.7	407.1	438.7	455.7	474.2
21400	136.5	199.6	254.0	310.5	359.1	388.0	425.3	452.0	470.8	489.7
21401	129.5	193.2	253.6	312.5	364.5	408.2	445.6	473.9	501.7	523.2
21402	117.0	177.3	239.1	302.4	360.3	406.5	442.3	473.1	498.5	521.7
21403	119.3	180.8	235.4	291.5	347.8	397.5	432.9	463.0	495.2	523.7
21404	135.8	196.1	250.6	306.5	351.4	381.8	396.3	443.2	476.5	496.4
21405	145.5	203.5	255.1	309.2	350.8	375.9	399.8	423.6	445.4	465.2
21406	99.1	150.7	197.7	251.2	302.3	344.9	382.2	410.2	438.1	463.4
21407	121.2	180.7	224.4	270.3	312.6	350.6	381.0	400.0	427.4	437.2
21408	113.1	173.7	225.3	286.1	335.2	376.1	412.1	451.7	471.7	490.4
21409	130.7	197.7	260.7	128.4	383.6	437.8	456.5	515.2	540.6	578.6
21410	122.7	188.6	249.9	313.1	375.9	416.5	463.0	496.4	519.7	534.7
21411	129.6	195.9	260.0	318.6	366.6	410.9	447.9	476.0	499.2	516.6
21412	106.8	163.9	221.4	281.1	335.6	374.4	407.8	440.7	467.0	489.0
21413	136.1	199.0	261.1	320.8	374.0	415.4	457.3	491.8	515.8	540.2
21414	105.9	167.7	226.6	281.2	325.1	361.0	397.0	407.5	428.4	441.5
21415	116.0	178.8	236.1	294.8	345.5	390.4	432.0	459.5	485.3	509.8
21416	106.2	158.6	207.7	261.8	302.5	338.9	374.9	396.0	415.7	441.8
21417	111.8	180.5	240.1	289.5	341.2	376.2	416.3	448.3	467.9	487.5
21418	109.5	166.1	216.9	280.0	328.2	368.3	393.6	423.0	437.4	447.4
21419	100.2	160.0	217.6	280.4	341.7	393.0	438.4	468.1	491.6	511.8
21420	112.6	165.7	221.6	277.3	332.5	376.5	415.1	437.9	463.6	491.0
21421	109.8	168.3	229.4	282.2	335.5	365.8	406.5	426.0	450.6	472.1
MEAN	116.5	176.2	232.0	281.5	339.8	378.8	414.7	443.8	467.8	488.1
S.D.	12.87	15.59	18.10	35.30	21.85	25.10	25.79	30.98	32.15	35.21
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP: 1000.0 PPM									
	7	8	9	10	11	12	13	14	15	16
ANIMAL										
21394	498.8	509.1	522.7	526.0	518.0	525.2	536.8	548.5	557.8	556.6
21395	491.3	508.6	521.7	537.8	533.8	545.5	560.3	567.5	578.0	585.7
21396	493.9	512.1	531.4	541.7	545.8	554.8	566.5	579.0	596.8	611.1
21397	444.0	454.6	469.9	473.4	464.1	462.1	471.5	474.0	481.3	488.1
21398	489.9	500.7	524.2	538.9	521.8	523.5	512.3	531.9	544.7	539.6
21399	492.9	507.0	524.2	529.8	524.0	531.9	543.3	549.6	573.2	585.2
21400	500.2	519.8	533.8	543.7	552.9	558.2	567.3	589.9	592.4	611.5
21401	545.5	559.8	576.9	589.1	584.8	594.9	624.9	643.0	659.8	668.7
21402	531.9	547.5	569.0	573.6	573.8	585.1	596.1	600.2	611.4	616.3
21403	545.1	570.7	591.0	594.0	598.2	614.4	627.1	629.9	644.3	646.8
21404	515.2	529.9	549.5	565.4	558.6	571.0	582.7	594.3	612.9	623.4
21405	479.9	489.9	495.4	496.5	505.4	508.1	520.4	530.2	536.4	546.8
21406	478.8	495.2	502.2	515.9	524.5	535.7	548.7	561.4	580.9	597.6
21407	472.9	481.8	493.4	500.3	505.3	518.3	525.5	536.9	532.7	544.1
21408	510.7	527.6	537.5	546.7	547.3	561.2	575.3	584.9	596.9	605.0
21409	607.4	632.1	655.7	668.9	666.9	693.3	707.2	723.0	744.2	750.9
21410	560.0	568.9	598.2	603.8	606.3	620.2	630.8	643.0	664.1	677.8
21411	539.4	560.7	573.3	577.6	582.3	580.8	575.1	580.6	586.9	598.8
21412	507.3	527.9	546.7	551.9	550.5	550.5	558.7	579.3	601.7	615.5
21413	564.4	586.4	610.9	618.2	630.4	638.3	657.9	671.6	698.0	708.0
21414	426.0	448.0	457.6	473.0	469.6	443.8	430.6	462.4	480.0	486.8
21415	527.7	539.2	552.5	565.4	556.9	570.8	575.2	588.3	592.5	605.0
21416	457.1	463.5	488.5	490.8	486.1	496.6	505.0	525.9	543.9	541.2
21417	511.9	528.5	543.2	556.0	554.3	568.1	584.3	590.5	605.6	622.2
21418	467.4	482.7	494.0	506.3	502.1	511.5	518.4	527.3	541.1	558.5
21419	537.0	546.2	570.0	581.8	585.9	586.2	579.6	588.8	612.2	625.1
21420	508.2	520.9	540.9	552.9	551.9	554.5	562.2	567.5	588.7	599.2
21421	495.7	510.0	535.2	547.8	537.4	544.3	560.1	570.4	587.0	606.0
MEAN	507.2	522.5	539.6	548.8	547.8	555.3	564.4	576.4	590.9	600.8
S.D.	38.80	40.86	43.99	44.32	46.17	51.48	55.56	54.43	57.39	58.47
N	28	28	28	28	28	28	28	28	28	28



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F1 ADULT MALES GROUP: 1000.0 PPM

WEEK 17

ANIMAL	
21394	566.2
21395	598.0
21396	621.0
21397	495.1
21398	560.9
21399	590.8
21400	611.6
21401	681.2
21402	633.6
21403	668.5
21404	628.6
21405	548.4
21406	604.1
21407	544.4
21408	613.1
21409	768.4
21410	681.4
21411	599.2
21412	623.7
21413	718.2
21414	490.9
21415	617.6
21416	551.8
21417	631.9
21418	571.5
21419	633.0
21420	605.8
21421	614.7
MEAN	609.8
S.D.	60.27
N	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	-3	-2	-1	F1 ADULT MALES GROUP: 0	2000.0 PPM 1	2	3	4	5	6
ANIMAL										
21422	98.0	149.7	207.7	263.6	312.9	347.5	383.2	404.8	418.7	438.0
21423	89.7	145.5	204.6	257.5	306.2	341.2	362.4	306.7	328.1	359.5
21424	99.1	161.8	211.0	268.4	314.3	351.6	386.1	405.5	429.8	442.1
21425	101.8	154.0	197.5	237.0	280.1	305.0	330.1	344.7	369.7	339.8
21426	101.5	155.4	202.9	253.0	294.8	330.3	356.4	382.1	400.7	411.1
21427	124.4	178.8	228.8	285.1	325.8	361.6	406.9	434.8	460.0	483.9
21428	128.2	188.9	242.3	297.5	341.4	376.9	407.1	431.7	453.0	474.2
21429	104.3	162.6	216.4	271.9	319.1	356.0	398.0	419.3	448.8	473.1
21430	94.0	145.0	198.3	241.7	283.3	314.3	345.1	371.0	393.1	411.8
21431	108.1	167.7	220.4	270.6	313.2	347.6	381.9	397.4	420.0	435.1
21432	92.2	144.0	190.2	233.4	286.5	314.6	349.3	376.1	395.2	412.9
21433	93.8	143.6	192.9	237.6	273.9	310.3	333.4	355.6	373.8	399.7
21434	120.3	184.5	242.6	307.2	356.8	396.5	437.5	462.4	479.0	506.1
21435	118.2	189.2	243.3	306.0	364.6	405.2	438.0	459.7	482.6	504.5
21436	102.1	154.3	204.5	255.0	295.2	320.8	340.5	367.3	382.6	399.6
21437	113.0	173.8	226.8	276.0	322.6	355.8	385.6	413.8	438.9	463.3
21438	111.3	166.2	215.4	263.0	294.3	328.2	356.0	378.6	391.9	406.3
21439	115.6	171.0	220.0	271.4	315.9	343.3	372.3	399.5	418.5	436.2
21440	133.2	187.9	241.7	294.4	338.0	368.8	404.2	423.8	439.0	467.8
21441	109.3	166.8	220.7	271.3	316.3	346.7	379.1	403.3	422.1	446.0
21442	128.6	182.4	231.0	279.6	320.9	352.3	380.0	400.5	419.3	432.9
21443	101.2	167.3	234.6	294.4	352.6	394.4	431.3	460.4	481.2	509.5
21444	124.8	189.9	248.9	304.8	352.9	395.6	431.6	455.9	485.0	506.2
21445	108.7	159.7	214.9	260.2	301.2	326.9	365.4	390.0	416.8	437.3
21446	107.7	163.1	222.2	284.8	334.9	373.3	416.8	444.4	469.1	499.4
21447	116.7	182.5	237.3	291.7	334.5	367.8	401.6	428.0	439.8	451.5
21448	132.8	187.4	241.8	290.8	335.0	375.4	410.5	441.4	465.4	486.6
21449	101.1	156.2	209.0	266.2	315.7	357.8	385.9	405.9	403.4	357.7
MEAN	110.0	167.1	220.3	272.6	318.0	352.3	384.9	405.9	425.9	442.6
S.D.	12.67	15.33	17.08	21.33	24.09	27.55	31.41	37.65	38.92	46.78
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT MALES GROUP:					2000.0 PPM				
	7	8	9	10	11	12	13	14	15	16
ANIMAL										
21422	455.0	467.4	488.4	493.1	498.0	512.5	531.8	528.1	545.5	548.6
21423	388.9	396.0	425.0	423.6	414.4	432.3	454.5	458.6	459.6	473.1
21424	458.4	470.1	476.9	483.8	489.8	495.6	497.5	508.4	501.3	501.5
21425	342.1	361.1	389.2	386.4	385.7	399.6	414.1	427.8	406.7	383.5
21426	431.7	444.7	446.6	458.0	459.4	474.0	477.2	484.9	493.4	497.1
21427	504.4	518.5	534.8	554.1	546.5	559.1	566.0	574.3	592.9	601.7
21428	484.6	499.8	520.7	529.8	519.3	537.4	535.1	544.1	556.6	564.2
21429	489.3	499.4	516.3	533.4	540.0	548.6	565.3	577.6	597.0	600.4
21430	428.6	441.7	458.7	455.6	456.3	476.5	480.9	502.7	457.1	480.1
21431	447.9	456.7	471.9	483.8	493.8	503.1	512.8	516.1	530.8	535.9
21432	434.7	450.2	462.1	474.0	465.8	473.3	477.5	483.5	500.1	495.7
21433	415.7	429.4	441.3	454.2	450.5	465.2	470.0	479.4	492.4	495.1
21434	519.1	534.1	551.5	564.1	562.7	577.4	581.9	595.3	614.0	616.0
21435	523.6	545.9	558.9	566.5	573.8	592.9	596.0	603.0	605.1	608.4
21436	415.8	421.6	432.0	443.6	443.5	456.4	451.2	451.4	447.9	458.4
21437	478.6	492.6	510.5	517.8	520.1	531.8	535.6	542.7	551.2	555.4
21438	420.9	436.6	450.6	456.8	456.0	463.4	466.1	472.0	481.9	486.8
21439	450.3	470.9	485.9	497.9	500.0	513.3	520.8	517.3	526.0	523.3
21440	483.1	500.2	510.7	512.4	517.0	532.7	540.1	549.4	567.6	571.9
21441	464.1	473.5	483.7	496.5	500.1	496.9	497.8	501.4	509.4	510.3
21442	453.3	463.8	477.1	478.0	489.3	499.3	502.0	509.9	511.1	522.3
21443	527.7	526.1	543.4	559.9	571.7	589.4	596.6	579.1	601.9	608.9
21444	517.6	534.5	551.0	559.2	559.0	571.0	580.6	591.7	599.9	608.5
21445	455.1	470.3	485.4	494.0	485.7	490.6	499.6	514.5	531.4	537.9
21446	518.3	524.1	532.8	532.7	530.5	537.9	550.5	563.6	562.2	576.5
21447	473.2	485.3	495.6	508.5	505.1	508.2	517.6	514.4	525.5	538.3
21448	504.9	520.3	541.8	551.2	549.6	567.5	577.5	586.9	595.2	592.5
21449	253.7	dead								
MEAN	455.0	475.4	490.5	498.9	499.4	511.3	518.4	525.1	532.0	536.7
S.D.	59.12	44.77	43.93	46.48	47.80	48.47	48.48	47.89	55.13	56.81
N	28	27	27	27	27	27	27	27	27	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F1 ADULT MALES GROUP: 2000.0 PPM

WEEK 17

ANIMAL	
21422	554.9
21423	486.3
21424	512.9
21425	428.6
21426	496.6
21427	611.4
21428	575.3
21429	601.2
21430	497.5
21431	538.3
21432	495.7
21433	495.7
21434	620.7
21435	608.0
21436	466.4
21437	561.6
21438	495.0
21439	533.4
21440	587.8
21441	513.7
21442	530.5
21443	615.5
21444	609.8
21445	546.2
21446	584.8
21447	547.7
21448	601.4

MEAN	545.1
S.D.	52.58
N	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP:

0.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL						r/a				
21338	19.8	23.3	25.7	28.1	31.7	28.4	33.0	31.2	32.1	31.5
21339	17.7	21.6	23.5	25.3	27.7	29.2	29.8	27.8	28.5	29.4
21340	19.1	23.6	26.2	26.8	28.9	26.4	33.4	29.1	31.4	31.1
21341	18.1	20.0	22.2	24.5	27.3	27.5	27.5	26.2	26.3	26.6
21342	17.0	20.6	23.5	23.9	27.7	26.9	29.3	29.0	29.4	27.3
21343	18.9	21.3	25.7	26.1	30.0	30.2	30.9	30.7	30.7	31.3
21344	20.4	23.0	25.9	26.6	30.0	30.0	30.2	29.4	30.3	30.0
21345	17.7	20.8	22.3	24.1	26.6	26.1	27.3	27.1	27.4	26.9
21346	19.1	23.0	25.2	25.3	26.9	27.4	27.5	27.0	26.9	27.3
21347	17.9	19.6	21.0	23.6	26.3	26.0	28.0	29.1	29.3	29.3
21348	18.2	21.2	23.3	24.7	27.1	26.2	21.5	21.1	25.1	24.4
21349	21.1	23.7	24.9	27.3	29.2	28.9	28.9	28.1	29.0	26.9
21350	20.6	23.1	25.2	27.3	29.1	30.2	30.7	28.7	28.8	29.1
21351	19.1	20.4	21.4	22.0	25.0	24.7	23.7	23.8	24.1	23.6
21352	19.6	21.9	25.0	26.9	28.3	26.4	26.5	25.4	27.6	27.6
21353	21.6	24.4	27.7	29.1	31.9	29.6	30.3	29.3	30.7	30.5
21354	19.8	21.9	23.1	23.9	25.4	26.0	27.7	27.2	26.8	27.3
21355	20.8	23.6	25.6	26.5	28.3	29.6	29.6	28.4	27.3	28.4
21356	18.4	21.1	22.3	23.0	25.0	26.6	27.1	26.8	26.1	25.7
21357	17.9	21.9	24.3	25.3	27.2	27.8	27.7	27.4	27.7	26.4
21358	23.8	27.7	31.7	31.6	32.2	30.4	34.4	34.2	34.8	33.6
21359	21.3	24.0	26.6	27.5	30.2	30.6	30.7	30.3	31.9	30.1
21360	19.4	21.8	24.3	26.0	27.6	28.2	29.6	27.8	27.9	29.1
21361	19.9	25.0	28.8	29.9	31.8	30.5	32.3	30.9	30.9	30.4
21362	20.1	22.4	22.6	25.5	27.0	26.7	27.1	27.1	27.4	27.3
21363	19.1	21.2	22.3	23.8	25.1	23.9	25.5	25.8	26.3	26.1
21364	21.1	25.4	27.5	31.0	33.0	32.2	33.2	34.1	35.0	35.1
21365	19.0	22.3	23.4	24.4	26.2	25.4	25.1	25.7	26.8	26.6
MEAN	19.5	22.5	24.7	26.1	28.3	27.9	28.9	28.2	28.8	28.5
S.D.	1.49	1.81	2.40	2.35	2.32	2.12	3.01	2.74	2.67	2.62
N	28	28	28	28	28	27	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP: 0.0 PPM

WEEK	8	9	10	13	14	15	16
ANIMAL							
21338	29.1	29.6	29.6	r	30.2	30.9	31.2
21339	28.1	28.0	28.9	r	31.3	27.5	30.9
21340	30.4	26.7	28.5	r	28.7	28.2	29.7
21341	27.2	26.6	26.8	r	27.5	27.6	26.3
21342	27.0	24.8	27.2	r	27.4	27.4	28.2
21343	29.9	29.7	29.6	r	31.4	32.0	30.0
21344	29.3	29.1	27.9	r	31.0	29.2	30.1
21345	26.7	27.3	27.4	r	27.2	25.4	24.9
21346	26.4	27.1	27.8	r	27.6	28.0	28.4
21347	29.4	27.9	28.4	r	28.6	27.5	28.8
21348	25.3	24.5	25.2	r	22.8	23.4	26.8
21349	27.0	27.4	27.3	r	27.0	27.8	28.0
21350	28.1	28.7	28.6	r	30.8	28.9	29.1
21351	23.4	23.4	24.3	r	23.7	23.0	25.1
21352	26.3	26.4	26.4	r	26.9	27.1	25.2
21353	29.2	28.9	28.1	r	31.0	30.4	30.6
21354	27.4	26.4	26.0	r	27.1	26.9	26.2
21355	27.9	26.6	27.1	r	28.3	26.3	27.5
21356	24.6	23.9	24.5	r	26.5	25.4	25.7
21357	26.5	27.8	28.4	r	27.3	27.3	28.0
21358	32.0	32.4	32.6	r	34.3	31.4	34.3
21359	29.1	30.7	31.5	r	30.7	30.6	30.1
21360	28.4	29.0	29.9	r	27.3	30.4	32.0
21361	31.1	28.7	30.5	r	31.6	29.5	29.0
21362	26.2	27.2	27.5	r	25.3	26.7	28.6
21363	24.3	23.8	25.1	r	24.2	25.2	25.4
21364	33.8	33.0	34.6	r	35.1	34.0	37.7
21365	26.4	26.2	26.6	r	24.6	25.7	27.4
MEAN	27.9	27.6	28.1		28.4	28.0	28.8
S.D.	2.33	2.35	2.35		3.02	2.55	2.88
N	28	28	28		28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP: 300.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21366	20.9	23.4	24.5	24.6	27.7	27.1	28.3	28.0	27.5	26.3
21367	23.3	25.5	29.2	30.3	31.3	25.3	29.3	22.7	28.7	28.7
21368	16.8	21.4	24.6	25.3	26.8	25.8	28.0	28.1	27.3	26.4
21369	21.9	24.7	27.6	28.9	31.7	30.8	31.7	31.9	32.6	31.4
21370	17.6	20.2	22.9	24.0	26.9	26.4	27.0	27.2	27.0	27.5
21371	17.1	20.6	22.8	26.3	28.7	28.8	29.1	29.4	29.1	29.5
21372	20.0	21.0	23.5	24.3	26.0	25.6	26.1	26.4	26.6	25.7
21373	21.6	23.9	26.0	27.9	29.6	30.9	31.2	31.6	30.3	30.9
21374	18.1	20.6	24.0	25.8	26.0	26.7	27.6	27.6	27.3	27.1
21375	21.9	24.7	27.9	29.6	31.0	31.5	32.2	32.5	32.3	31.9
21376	20.0	24.2	25.9	26.7	28.2	27.7	29.9	29.4	29.1	30.4
21377	20.6	23.6	25.9	28.1	32.0	28.0	30.7	30.5	31.8	26.2
21378	20.7	22.1	25.4	26.7	29.8	30.0	30.3	29.8	30.6	31.3
21379	19.5	22.1	25.0	26.2	28.4	28.6	28.9	28.8	28.6	28.9
21380	19.0	21.3	24.2	25.0	27.5	27.5	27.3	27.3	27.2	26.2
21381	19.0	22.0	25.0	25.8	28.4	28.8	25.8	30.6	28.5	30.2
21382	19.1	23.1	27.2	28.5	32.8	31.9	32.4	32.5	32.1	32.6
21383	20.5	22.7	25.8	27.4	30.7	31.0	33.3	30.6	32.1	31.5
21384	20.6	22.2	25.7	26.9	29.9	30.5	30.6	30.1	30.1	29.3
21385	21.8	23.8	26.9	27.5	29.7	28.9	29.6	30.3	29.6	30.0
21386	19.8	23.9	27.3	29.8	31.9	30.6	32.1	32.3	32.8	31.3
21387	18.3	21.9	26.6	28.5	31.0	31.3	32.4	32.6	32.8	31.4
21388	20.2	23.2	25.3	26.2	28.3	27.8	28.3	27.7	27.9	26.0
21389	21.3	24.6	26.9	27.7	30.2	31.0	31.7	30.3	30.6	29.7
21390	21.0	27.2	30.1	32.5	35.0	r/a	34.9	36.1	37.6	36.5
21391	20.0	21.9	23.4	24.3	27.0	26.8	27.4	28.3	27.6	26.1
21392	22.0	24.7	27.1	28.1	30.5	30.8	30.0	30.5	31.4	30.2
21393	20.5	24.3	27.5	30.2	32.8	r/a	33.1	32.9	33.4	33.3
MEAN	20.1	23.0	25.9	27.2	29.6	28.9	30.0	29.9	30.1	29.5
S.D.	1.58	1.67	1.80	2.09	2.25	2.05	2.33	2.60	2.57	2.66
N	28	28	28	28	28	26	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP: 300.0 PPM

WEEK	8	9	10	13	14	15	16
ANIMAL							
21366	25.3	26.4	27.4	r	27.4	25.9	25.1
21367	24.0	28.8	27.4	r	26.9	23.4	30.1
21368	26.7	25.7	25.2	r	26.9	26.7	26.2
21369	31.2	31.5	31.4	r	32.6	32.5	32.9
21370	26.7	26.9	27.1	r	27.2	26.9	27.0
21371	26.4	27.1	27.5	r	28.9	27.8	28.3
21372	23.9	23.3	26.3	r	28.4	27.6	27.2
21373	29.7	30.3	30.4	r	29.7	29.2	30.5
21374	26.9	25.9	27.9	r	25.5	27.4	28.0
21375	30.9	30.7	30.8	r	33.8	31.4	31.6
21376	29.4	28.2	31.4	r	32.4	32.3	32.0
21377	24.8	27.2	26.6	r	26.1	27.6	28.9
21378	30.3	30.6	30.4	r	30.6	31.1	30.7
21379	27.0	27.2	27.7	r	22.0	27.1	28.8
21380	26.8	25.8	27.2	r	26.0	26.8	27.8
21381	27.3	30.2	30.6	r	26.1	30.0	33.9
21382	31.9	31.7	31.6	r	30.0	31.6	33.8
21383	28.6	27.4	30.5	r	r/s	r/s	r/s
21384	28.9	30.3	29.5	r	29.9	28.6	30.4
21385	29.9	28.3	30.2	r	30.9	28.7	30.8
21386	31.5	30.1	31.7	r	32.4	32.8	33.4
21387	30.8	29.9	30.8	r	31.7	31.1	33.0
21388	25.9	24.0	26.0	r	27.6	24.9	27.5
21389	30.4	30.4	31.3	r	33.4	32.9	33.9
21390	35.3	36.1	34.7	r	32.9	34.2	37.3
21391	26.8	25.8	27.1	r	28.1	27.1	27.2
21392	29.9	30.7	31.1	r	32.7	21.1	27.0
21393	33.2	31.5	32.6	r	31.4	32.6	34.3
MEAN	28.6	28.6	29.4		29.3	28.9	30.3
S.D.	2.82	2.78	2.37		2.98	3.19	3.06
N	28	28	28		27	27	27



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP: 1000.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21394	20.3	22.8	25.4	27.4	30.3	30.6	31.1	29.7	29.3	29.0
21395	18.5	20.8	23.3	26.0	29.2	29.8	29.8	28.1	28.0	27.3
21396	16.2	20.7	25.3	28.0	29.9	30.9	30.7	30.2	30.7	29.2
21397	18.6	20.7	22.5	23.0	23.7	23.7	24.2	24.4	24.7	23.9
21398	17.3	20.0	22.9	25.4	26.4	28.9	28.1	26.8	28.2	28.4
21399	18.4	22.7	25.3	26.6	28.4	28.5	29.5	28.3	28.3	28.4
21400	21.7	25.0	28.0	28.7	30.2	29.9	30.5	30.6	30.2	28.2
21401	21.5	25.3	27.5	28.7	31.5	31.5	32.4	31.4	31.2	31.1
21402	20.5	24.1	27.0	28.9	31.4	31.1	31.7	31.1	32.1	29.6
21403	19.9	23.1	25.9	29.1	31.7	31.7	31.9	32.2	33.3	33.1
21404	21.9	24.5	28.1	29.1	30.1	r/a	34.0	34.8	34.4	32.9
21405	21.5	22.9	24.8	26.9	28.0	26.5	27.8	28.1	28.8	27.4
21406	17.2	19.1	21.6	23.6	26.0	27.4	27.1	26.6	27.6	26.3
21407	18.4	19.5	20.9	22.4	23.6	23.9	23.8	24.0	23.7	23.7
21408	18.4	20.5	23.1	25.3	27.0	26.5	27.5	28.2	28.8	27.3
21409	22.4	23.8	26.7	30.0	32.5	31.2	35.9	33.6	35.4	35.0
21410	21.4	26.0	28.7	30.8	31.8	31.8	32.5	31.9	30.4	30.4
21411	20.1	24.7	27.4	27.8	30.1	28.5	30.6	29.0	30.2	30.1
21412	18.0	21.1	25.2	26.4	28.7	26.7	28.0	28.8	29.1	27.1
21413	22.4	26.1	28.7	31.1	32.7	r/a	31.9	31.8	32.9	32.3
21414	17.8	21.8	23.9	24.8	26.9	r/s	24.5	26.3	24.8	23.0
21415	19.3	22.2	24.9	27.1	30.6	29.9	29.1	30.8	30.6	29.9
21416	17.6	22.0	25.0	26.1	28.6	28.9	28.6	28.0	29.4	29.3
21417	20.0	23.9	25.6	27.9	28.2	29.3	30.7	29.8	30.0	29.8
21418	18.2	21.1	24.5	26.3	28.4	27.6	28.7	28.2	30.3	29.1
21419	17.7	21.5	24.4	26.3	29.5	30.6	30.5	28.9	30.5	29.9
21420	18.6	21.7	25.2	27.8	30.2	30.5	30.5	30.9	31.0	29.6
21421	19.1	23.7	25.5	26.6	27.3	28.2	27.9	28.3	29.5	29.4
MEAN	19.4	22.5	25.3	27.1	29.0	29.0	29.6	29.3	29.8	28.9
S.D.	1.74	1.95	2.03	2.14	2.37	2.25	2.80	2.51	2.66	2.72
N	28	28	28	28	28	25	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP: 1000.0 PPM

WEEK	8	9	10	13	14	15	16
ANIMAL							
21394	28.7	27.7	26.7	r	30.2	27.5	28.6
21395	25.9	26.1	27.5	r	29.9	26.9	28.5
21396	29.7	29.6	29.3	r	32.5	31.6	31.9
21397	23.3	23.1	24.5	r	24.3	23.5	23.7
21398	28.5	29.9	30.6	r	26.7	26.9	24.3
21399	27.9	28.0	27.8	r	29.3	29.7	30.0
21400	29.1	29.3	29.8	r	35.0	31.2	32.8
21401	31.9	30.6	30.8	r	35.5	33.3	34.9
21402	31.2	30.8	30.4	r	32.1	30.7	29.8
21403	33.9	31.5	31.6	r	32.5	29.1	34.1
21404	32.8	32.8	33.9	r	34.4	33.2	33.3
21405	28.1	26.4	26.5	r	29.3	28.8	28.1
21406	25.5	25.5	26.5	r	28.8	27.2	29.5
21407	22.8	22.5	23.9	r	24.3	21.1	23.9
21408	27.5	26.0	26.4	r	29.9	28.7	29.5
21409	35.3	35.4	34.1	r	38.8	35.9	34.4
21410	29.4	30.7	29.9	r	31.9	30.3	31.7
21411	31.3	28.3	27.9	r	27.5	22.3	30.7
21412	29.0	29.5	29.4	r	28.1	30.6	32.7
21413	32.3	31.7	32.6	r	32.9	33.3	32.8
21414	22.4	23.1	24.8	r	28.8	22.3	28.0
21415	29.3	27.2	29.0	r	29.4	26.6	30.2
21416	28.3	27.7	27.8	r	31.0	29.5	28.5
21417	29.2	28.6	29.1	r	31.3	30.1	31.0
21418	28.0	28.7	29.4	r	31.4	31.0	33.1
21419	28.6	28.4	29.2	r	30.3	30.5	31.4
21420	29.2	28.8	30.9	r	31.3	30.9	30.8
21421	28.2	29.3	30.3	r	31.7	29.4	31.5
MEAN	28.8	28.5	28.9		30.7	29.0	30.3
S.D.	3.04	2.91	2.57		3.14	3.53	2.97
N	28	28	28		28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULTS MALES GROUP: 2000.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21422	17.3	20.9	24.5	26.0	28.2	26.9	27.5	27.0	27.7	27.7
21423	16.6	20.8	24.1	25.2	26.7	24.8	14.9	14.7	24.1	26.8
21424	19.7	22.6	25.7	28.0	29.8	30.1	29.4	28.9	29.1	27.9
21425	17.1	19.7	20.1	22.4	22.9	22.1	23.8	23.2	21.7	12.6
21426	17.3	19.2	21.7	23.3	24.4	24.7	25.1	24.0	24.5	23.6
21427	18.5	20.2	22.1	22.3	25.5	27.2	27.9	26.8	27.7	26.2
21428	20.0	22.1	25.3	25.9	27.7	27.4	27.7	28.3	28.2	28.4
21429	19.1	22.8	25.6	27.2	28.9	31.2	30.8	30.4	32.7	30.7
21430	15.1	18.9	21.0	22.0	23.5	23.0	22.7	24.3	24.5	23.6
21431	18.9	21.5	24.0	26.0	27.6	28.1	28.0	27.9	29.2	25.7
21432	15.5	18.5	20.5	22.5	23.8	23.9	24.3	26.0	24.8	25.1
21433	16.5	20.0	21.7	22.4	25.8	24.5	24.8	24.9	26.8	27.6
21434	21.1	24.8	27.8	30.4	31.8	32.1	31.3	31.1	31.6	30.7
21435	20.2	24.8	28.3	29.5	32.2	29.8	29.9	30.5	30.7	30.3
21436	17.9	21.1	24.5	25.2	27.8	25.1	26.2	25.3	24.8	25.0
21437	19.5	22.5	23.3	25.5	28.6	27.9	28.8	28.8	29.0	29.4
21438	17.9	19.7	20.8	21.4	23.3	23.7	25.7	24.8	25.9	25.6
21439	18.6	21.0	23.2	24.2	24.3	24.8	25.7	26.0	26.2	25.5
21440	21.1	22.3	24.2	25.5	26.6	27.2	27.6	26.6	28.0	27.7
21441	18.4	21.5	23.4	25.0	26.3	26.7	26.7	27.0	27.7	28.1
21442	21.3	21.3	23.1	25.3	27.0	27.1	26.3	26.3	26.6	26.1
21443	17.8	23.0	26.7	27.7	29.8	29.4	29.0	28.7	29.4	29.7
21444	20.0	23.0	24.7	26.6	27.9	28.7	28.3	28.5	28.8	26.7
21445	17.1	20.1	22.6	24.1	24.8	25.1	25.4	26.4	26.6	25.7
21446	19.5	23.6	27.4	28.5	30.9	30.7	31.2	32.2	33.8	32.0
21447	21.4	24.5	25.7	28.3	30.3	30.0	29.0	29.2	30.0	28.4
21448	21.0	22.3	24.0	25.9	28.8	28.3	28.8	29.4	29.3	30.1
21449	18.8	22.2	24.6	26.4	29.9	28.3	28.6	27.1	16.1	4.9
MEAN	18.7	21.6	24.0	25.4	27.3	27.1	27.0	26.9	27.3	26.1
S.D.	1.75	1.72	2.17	2.37	2.62	2.63	3.24	3.29	3.50	5.47
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULTS MALES GROUP: 2000.0 PPM

WEEK	8	9	10	13	14	15	16
ANIMAL							
21422	27.9	28.1	29.4	r	30.2	27.5	29.6
21423	19.0	25.1	22.4	r	23.9	21.8	25.0
21424	28.4	26.7	26.7	r	29.3	25.1	25.0
21425	20.5	24.8	22.4	r	23.7	15.5	18.9
21426	23.5	22.4	22.6	r	24.0	23.7	23.5
21427	25.2	25.3	27.2	r	28.5	28.8	28.5
21428	28.1	27.5	28.7	r	30.6	28.9	27.8
21429	30.0	29.3	30.5	r	33.2	32.8	30.6
21430	23.1	24.5	22.1	r	26.6	18.0	21.1
21431	24.2	26.5	28.4	r	31.2	29.9	28.9
21432	24.9	25.7	26.1	r	25.4	26.2	23.1
21433	26.4	24.8	26.1	r	25.5	25.4	23.5
21434	29.4	30.1	31.1	r	32.4	31.4	32.0
21435	30.5	30.3	30.5	r	32.2	30.3	29.7
21436	25.0	23.7	24.7	r	25.4	23.8	25.1
21437	28.8	28.8	29.6	r	28.9	29.3	27.7
21438	24.6	24.5	24.3	r	26.5	24.1	24.3
21439	24.8	25.2	25.5	r	24.2	25.5	24.8
21440	28.0	26.9	27.5	r	30.9	31.1	29.4
21441	27.0	25.6	27.4	r	25.6	26.1	24.6
21442	27.3	26.4	25.1	r	27.3	28.4	27.3
21443	27.7	25.0	27.8	r	28.5	28.6	28.1
21444	27.0	27.1	27.5	r	28.4	27.5	27.5
21445	26.3	25.9	26.1	r	28.1	28.8	27.2
21446	30.7	28.7	26.4	r	29.8	26.8	30.5
21447	29.7	29.3	29.4	r	28.1	27.1	28.3
21448	29.7	29.6	29.8	r	29.6	30.0	29.4
21449		dead					
MEAN	26.6	26.6	26.9		28.1	26.8	26.7
S.D.	2.93	2.10	2.64		2.77	3.90	3.12
N	27	27	27		27	27	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
0.0 PPM	21450	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21451	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21452	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21453	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21454	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21455	NORMAL	86	-21- 80	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		BODY	1	84	UROGENITAL DISCHARGE, RED
		SKIN	34	81-114	ALOPECIA (LFB 10, MUL 24)
	21456	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21457	NORMAL	4	-21--11	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	-8	FOUND DEAD *
	21458	NORMAL	117	-21-111	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		SKIN	4	112-115	ALOPECIA (LFB 4)
	21459	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21460	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21461	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21462	NORMAL	110	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		SKIN	11	89- 99	ALOPECIA (AXB 11)
	21463	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21464	NORMAL	135	-21-129	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	129	SCHEDULED SACRIFICE
	21465	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21466	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21467	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21468	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21469	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
0.0 PPM	21469	DEAD	1	115	SCHEDULED SACRIFICE
	21470	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21471	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21472	NORMAL	130	-21-124	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	124	SCHEDULED SACRIFICE
	21473	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21474	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21475	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21476	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
300.0 PPM		DEAD	1	114	SCHEDULED SACRIFICE
	21477	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21478	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21479	NORMAL	135	-21-129	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	129	SCHEDULED SACRIFICE
	21480	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21481	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21482	NORMAL	118	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		BODY	3	85- 87	UROGENITAL DISCHARGE, RED
	21483	NORMAL	138	-21-132	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	132	SCHEDULED SACRIFICE
	21484	NORMAL	139	-21-133	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	133	SCHEDULED SACRIFICE
	21485	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21486	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21487	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21488	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21489	NORMAL	4	-21--11	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	-1	FOUND DEAD *

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
300.0 PPM	21489	BEHAVIOR/CNS	1	-1	VOCALIZATION
			1	-1	PROSTRATION
		BODY	7	-7-	ABDOMINAL DISTENSION
			6	-6-	PALLOR (BDY 6)
			4	-4-	DEHYDRATED
			1	-5	UROGENITAL AREA WETNESS
		CARDIO-PULMONARY	1	-1	GASPING
	21490	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21491	NORMAL	33	-21- 27	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
		SKIN	88	28-115	ALOPECIA (LFB 88)
	21492	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21493	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21494	NORMAL	132	-21-126	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	126	SCHEDULED SACRIFICE
	21495	NORMAL	139	-21-133	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	133	SCHEDULED SACRIFICE
	21496	NORMAL	128	-21-122	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	122	SCHEDULED SACRIFICE
	21497	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21498	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21499	NORMAL	105	-21- 99	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	20	99-118	RED AND THICKENED EARS (EAR 20)
	21500	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21501	NORMAL	54	-21- 55	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		SKIN	69	42-117	ALOPECIA (HPB 2, LAL 26, LHB 30, MUL 11)
	21502	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21503	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21504	NORMAL	120	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	2	84- 85	PERIOULAR ENCRUSTATION (EYR 2)
		ORAL/DENTAL	2	84- 85	MALOCCLUSION
	21505	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
300.0 PPM	21505	DEAD	1	115	SCHEDULED SACRIFICE
1000.0 PPM	21506	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21507	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21508	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21509	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21510	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21511	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21512	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21513	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21514	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21515	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21516	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21517	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21518	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21519	NORMAL	135	-21-132	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	132	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	2	73- 74	PERIOULAR ENCRUSTATION (EYL 2)
		ORAL/DENTAL	1	75	OVERGROWN INCISORS
	21520	NORMAL	39	-21- 34	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	124	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	92	6-124	PERIOULAR ENCRUSTATION (EYB 89, EYL 2, EYR 1)
			3	34- 72	PERINASAL ENCRUSTATION
			4	6- 62	LACRIMATION (EYL 4)
		ORAL/DENTAL	2	48- 51	OVERGROWN INCISORS
			1	6	BROKEN INCISOR
	21521	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21522	NORMAL	133	-21-127	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	127	SCHEDULED SACRIFICE



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
1000.0 PPM	21523	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21524	NORMAL	133	-21-127	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	127	SCHEDULED SACRIFICE
	21525	NORMAL	124	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE
	21526	NORMAL	138	-21-132	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	132	SCHEDULED SACRIFICE
	21527	NORMAL	139	-21-133	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	133	SCHEDULED SACRIFICE
	21528	NORMAL	103	-21- 98	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	1	51	PERIOULAR ENCRUSTATION (EVL 1)
		ORAL/DENTAL	1	51	OVERGROWN INCISORS
		SKIN	16	99-114	ALOPECIA (LFB 16)
	21529	NORMAL	90	-21- 85	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	5	86- 93	PERIOULAR ENCRUSTATION (EVL 5)
		ORAL/DENTAL	31	86-116	MALOCCLUSION
			3	86- 88	BROKEN INCISOR
		SKIN	1	74	ALOPECIA (LFB 1)
	21530	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21531	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21532	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21533	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
2000.0 PPM	21534	NORMAL	49	-21- 43	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	70	44-114	PERIOULAR ENCRUSTATION (EVB 20, EYR 50)
			2	73- 74	PERINASAL ENCRUSTATION
			1	56	OCULAR DISCHARGE (EYR 1)
			1	51	LACRIMATION (EYR 1)
			2	50- 51	REDDENED EYES (EVL 2)
			1	44	PERINASAL DISCHARGE, RED
		ORAL/DENTAL	4	48- 74	OVERGROWN INCISORS
	21535	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21536	NORMAL	123	-21-118	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	118	SCHEDULED SACRIFICE

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
2000.0 PPM	21536	ORAL/DENTAL	1	51	OVERGROWN INCISORS
	21537	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21538	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21539	NORMAL	139	-21-133	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	133	SCHEDULED SACRIFICE
	21540	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21541	NORMAL	125	-21-119	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	119	SCHEDULED SACRIFICE
	21542	NORMAL	121	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
		EXCRETA	2	111-112	LOOSE FECES
	21543	NORMAL	118	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	8	-16- -9	PERIOULAR ENCRUSTATION (EVL 8)
			1	-14	LACRIMATION (EVL 1)
	21544	NORMAL	82	-21- 85	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	4	100-103	PERIOULAR ENCRUSTATION (EVR 4)
		SKIN	40	56-116	ALOPECIA (MUL 40)
	21545	NORMAL	139	-21-133	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	133	SCHEDULED SACRIFICE
	21546	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21547	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21548	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21549	NORMAL	126	-21-120	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	120	SCHEDULED SACRIFICE
	21550	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21551	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21552	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21553	NORMAL	120	-21-114	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	114	SCHEDULED SACRIFICE
	21554	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
	21555	NORMAL	122	-21-116	NO SIGNIFICANT CLINICAL OBSERVATIONS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL CLINICAL OBSERVATIONS  
F1 ADULT FEMALES

DOSAGE GROUP	ANIMAL	CATEGORY	#	STUDY DAYS	FINDING
-----					
2000.0 PPM					
	21555	DEAD	1	116	SCHEDULED SACRIFICE
	21556	NORMAL	123	-21-117	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	117	SCHEDULED SACRIFICE
	21557	NORMAL	121	-21-115	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	115	SCHEDULED SACRIFICE
	21558	NORMAL	132	-21-126	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	126	SCHEDULED SACRIFICE
	21559	NORMAL	75	-21- 69	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		BODY	4	113-116	ULCER (SDR 4)
			47	70-116	SWELLING (LAL 31, LHB 16)
			16	82- 97	UNKEMPT
		EYES/EARS/NOSE	5	78- 89	PERINASAL ENCRUSTATION
	21560	NORMAL	119	-21-113	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	113	SCHEDULED SACRIFICE
	21561	NORMAL	73	-21- 71	NO SIGNIFICANT CLINICAL OBSERVATIONS
		DEAD	1	116	SCHEDULED SACRIFICE
		EYES/EARS/NOSE	49	56-116	PERIOULAR ENCRUSTATION (EVB 3, EYR 46)
			3	56- 58	LACRIMATION (EYR 3)
			2	56- 57	SWOLLEN PERIOULAR TISSUE (EYR 2)
		ORAL/DENTAL	3	58- 80	OVERGROWN INCISORS

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
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WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT FEMALES GROUP: 0.0 PPM									
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21450	96.9	136.6	158.9	172.3	194.2	211.3	218.8	221.3	231.1	232.7
21451	106.6	150.4	182.8	204.6	218.4	241.1	253.8	256.3	252.9	268.6
21452	109.3	143.7	169.9	187.7	196.8	223.4	240.6	252.9	248.9	260.4
21453	96.8	136.5	162.6	180.1	196.6	211.4	222.4	230.8	236.7	242.4
21454	91.9	134.8	162.3	184.0	201.3	220.6	224.4	226.8	231.2	244.2
21455	101.4	144.7	175.0	199.9	218.8	235.1	248.6	258.9	267.0	269.4
21456	115.7	159.0	181.9	201.8	216.5	236.3	243.4	258.2	258.1	269.1
21457	128.9	190.0	dead							
21458	90.8	134.0	165.2	188.8	209.6	228.8	231.5	242.2	238.7	249.3
21459	98.6	138.5	165.3	184.2	206.9	220.2	231.5	238.7	247.6	253.8
21460	107.0	143.8	169.8	193.6	211.3	225.0	239.7	256.0	254.2	255.5
21461	105.0	148.2	164.7	188.6	200.3	218.1	235.0	241.8	248.8	264.6
21462	126.3	165.3	183.8	207.0	221.6	231.4	242.3	253.2	266.5	264.8
21463	109.1	149.5	168.8	186.5	206.3	220.4	227.2	238.8	243.9	248.6
21464	103.9	144.3	168.1	201.9	211.8	238.7	250.1	253.9	262.1	254.6
21465	114.0	163.4	182.7	202.0	224.1	236.2	245.9	251.1	264.6	269.6
21466	106.7	149.8	175.6	203.7	224.0	239.0	247.8	257.7	259.8	264.9
21467	91.9	133.4	158.5	181.3	200.7	217.9	230.1	237.7	238.2	254.9
21468	91.4	137.0	162.8	187.7	202.3	222.7	229.1	238.8	244.6	245.2
21469	100.6	141.5	164.3	179.7	204.7	224.6	226.3	236.1	239.8	241.4
21470	101.6	132.7	157.4	172.2	188.2	199.8	212.6	223.2	228.4	233.8
21471	98.4	142.5	169.6	192.0	209.6	226.3	240.2	252.3	254.6	264.4
21472	93.5	133.7	161.6	179.7	206.2	220.3	239.5	254.6	260.9	270.1
21473	88.1	125.8	159.3	179.1	192.3	215.4	216.6	228.0	232.5	242.9
21474	107.7	149.4	180.9	205.1	228.8	246.7	259.7	263.9	278.6	290.5
21475	99.9	144.4	173.5	197.6	218.2	235.7	241.3	246.5	260.4	264.6
21476	95.4	134.5	161.6	181.1	200.9	213.2	228.2	232.2	235.7	240.7
21477	104.1	146.7	172.9	186.8	208.4	224.7	232.4	231.8	248.4	257.7
MEAN	102.9	144.8	168.9	189.9	208.1	225.3	235.5	243.8	249.4	256.2
S.D.	9.96	12.85	8.24	10.44	10.58	10.86	11.70	12.34	13.12	13.42
N	28	28	27	27	27	27	27	27	27	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)			
	7	8	9	10
ANIMAL				
21450	237.9	233.6	243.8	246.3
21451	282.1	281.8	276.1	287.9
21452	265.5	277.9	274.9	276.9
21453	249.5	248.0	253.6	245.9
21454	256.2	258.6	264.5	268.4
21455	283.2	286.0	292.1	292.3
21456	271.6	275.1	275.3	284.0
21458	242.4	256.1	248.5	259.3
21459	260.8	260.8	270.5	263.0
21460	264.6	271.0	271.0	269.2
21461	271.1	270.0	277.5	278.9
21462	271.0	278.3	295.6	287.5
21463	250.7	254.4	261.7	261.7
21464	267.6	254.1	267.5	266.6
21465	270.5	269.0	283.8	291.1
21466	265.1	271.4	281.0	277.5
21467	261.7	262.5	264.8	272.9
21468	258.9	260.9	267.8	278.5
21469	229.3	249.6	242.2	257.9
21470	238.9	241.5	256.9	256.0
21471	271.3	276.2	276.5	282.3
21472	289.3	287.2	302.9	298.9
21473	245.2	244.9	255.6	255.5
21474	289.8	288.5	308.9	307.7
21475	264.5	263.4	273.5	276.1
21476	250.5	250.7	251.3	259.9
21477	255.0	253.7	269.8	276.0
MEAN	261.6	263.9	270.7	273.3
S.D.	15.45	14.70	16.75	15.52
N	27	27	27	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT FEMALES GROUP: 300.0 PPM									
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21478	106.8	153.2	178.1	204.3	222.0	244.1	260.5	272.2	277.3	292.8
21479	114.1	146.8	169.2	185.9	201.2	222.4	230.9	240.6	243.7	254.0
21480	115.5	148.2	177.5	198.5	217.0	229.6	241.3	251.1	258.2	272.3
21481	113.6	165.0	200.1	226.7	243.0	262.9	278.4	289.1	285.1	305.5
21482	121.9	162.0	188.1	207.8	219.9	253.8	276.6	281.2	284.2	296.9
21483	102.8	139.5	169.2	184.3	207.7	230.3	234.5	242.0	251.9	264.6
21484	100.5	145.5	174.4	201.0	217.5	241.4	254.7	269.0	272.7	274.1
21485	102.4	147.9	166.8	197.3	218.8	231.9	236.5	255.0	264.6	271.4
21486	111.1	144.1	163.0	189.7	206.4	226.5	242.0	256.6	272.4	277.5
21487	97.7	133.7	156.6	176.4	192.7	209.3	225.6	224.4	238.7	243.0
21488	102.1	148.9	177.9	206.8	233.0	252.3	258.6	277.2	288.3	295.6
21489	91.2	128.7	157.5	dead						
21490	108.2	144.1	166.2	189.0	201.5	228.5	240.9	247.4	249.3	262.0
21491	103.3	149.4	172.3	192.4	214.1	234.2	244.3	254.2	265.9	272.6
21492	108.5	146.4	170.4	188.7	213.6	232.4	227.6	246.3	249.5	255.0
21493	99.2	133.6	153.0	172.9	188.0	199.9	206.8	216.4	217.6	222.7
21494	88.0	132.9	153.1	169.4	186.3	198.8	214.0	223.4	223.5	223.9
21495	134.0	176.9	215.9	242.4	261.6	279.1	303.9	321.6	330.0	334.3
21496	112.8	149.1	177.8	204.3	235.5	254.3	274.5	284.8	291.5	300.3
21497	112.9	148.5	164.0	185.6	200.0	213.8	219.9	231.5	228.9	234.2
21498	96.2	126.8	147.0	168.4	191.5	206.9	206.8	232.6	242.7	252.5
21499	85.4	117.0	141.1	159.5	170.5	182.8	194.6	208.2	211.5	216.3
21500	104.0	139.4	164.2	182.1	195.1	212.6	224.3	232.2	231.6	244.5
21501	97.4	131.9	155.4	171.5	192.4	207.8	224.9	234.4	235.8	235.6
21502	111.2	149.4	166.8	189.1	192.4	226.9	231.0	248.7	254.0	249.3
21503	87.5	133.4	164.4	181.6	207.4	222.6	228.4	240.4	245.7	257.1
21504	108.4	163.5	188.1	203.8	236.9	255.4	284.2	297.4	298.9	299.8
21505	99.6	142.4	167.9	186.8	206.3	227.8	241.0	247.4	255.9	261.8
MEAN	104.9	144.6	169.5	191.3	210.1	229.2	241.0	252.8	258.1	265.5
S.D.	10.71	12.74	15.66	17.92	20.09	21.83	25.98	26.52	27.32	28.62
N	28	28	28	27	27	27	27	27	27	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)			
	F1 ADULT FEMALES GROUP: 300.0 PPM			
	7	8	9	10
ANIMAL				
21478	298.6	302.5	298.4	304.0
21479	260.6	263.0	263.5	270.7
21480	282.5	288.6	286.8	291.8
21481	319.7	312.4	327.5	332.8
21482	311.6	314.0	307.1	304.9
21483	265.3	268.6	279.8	281.5
21484	279.7	306.6	306.1	298.3
21485	271.7	281.4	292.7	289.3
21486	283.2	287.5	300.4	300.7
21487	249.6	255.2	272.9	273.4
21488	301.1	311.9	316.9	323.8
21490	273.6	270.5	271.3	279.2
21491	278.5	277.5	290.2	295.3
21492	263.3	267.4	269.8	268.1
21493	229.4	232.9	234.6	244.8
21494	243.3	250.8	250.6	246.1
21495	348.8	359.6	367.8	363.5
21496	307.2	308.1	325.5	326.9
21497	231.0	245.8	246.6	244.6
21498	255.8	268.1	278.1	278.9
21499	226.8	235.9	241.5	236.8
21500	255.2	249.6	255.0	262.4
21501	246.4	258.5	262.9	260.1
21502	263.1	265.6	277.2	290.8
21503	260.9	265.3	274.4	277.1
21504	308.4	299.1	304.4	309.3
21505	266.8	267.1	276.2	280.8
MEAN	273.4	278.3	284.4	286.5
S.D.	29.55	28.81	29.72	29.50
N	27	27	27	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21506	102.1	148.7	179.3	200.6	221.1	239.7	257.8	265.7	267.8	282.7
21507	90.5	138.0	160.9	178.6	196.6	216.6	230.4	233.8	234.4	239.3
21508	93.3	136.1	163.8	185.5	208.0	223.1	232.1	234.4	246.7	254.4
21509	94.9	141.4	168.6	183.8	197.4	216.0	222.4	242.1	240.2	242.6
21510	102.6	148.0	163.1	181.4	197.1	202.0	202.3	211.5	212.9	224.1
21511	101.2	143.5	172.5	194.8	213.9	238.2	249.1	255.8	262.1	277.2
21512	98.9	137.8	164.7	181.8	195.0	217.0	233.8	235.1	235.9	250.4
21513	98.1	142.7	169.6	190.2	200.9	215.7	237.4	243.4	245.8	251.5
21514	107.1	154.3	175.8	203.8	239.9	253.5	266.5	282.5	295.9	306.9
21515	97.1	146.9	178.4	202.9	225.3	247.6	259.5	265.4	275.7	283.1
21516	123.5	164.4	190.9	215.0	240.4	260.8	270.4	279.4	290.5	305.1
21517	98.5	141.8	162.0	187.6	201.5	217.6	227.9	244.5	240.9	253.0
21518	117.4	175.5	199.8	234.9	265.1	282.8	296.7	319.4	328.8	338.5
21519	108.6	153.7	181.9	209.1	233.7	284.5	290.1	311.5	316.4	318.2
21520	122.8	168.0	193.7	222.9	244.6	259.8	268.4	287.5	267.8	292.7
21521	81.0	125.8	144.3	172.9	193.1	208.8	238.5	240.8	245.4	250.4
21522	108.1	143.4	165.5	183.4	201.0	219.0	238.5	243.9	248.2	271.2
21523	118.9	160.6	188.1	208.5	239.7	251.4	263.4	281.1	280.3	294.0
21524	115.7	162.5	194.9	215.1	227.1	245.5	260.6	273.7	276.8	291.1
21525	103.3	150.6	179.1	198.5	218.4	235.9	244.8	256.7	263.0	275.0
21526	119.7	156.6	181.6	213.2	229.4	257.9	267.9	274.1	280.5	283.7
21527	121.3	156.1	178.3	198.1	213.6	225.5	235.5	244.1	248.6	252.8
21528	97.7	135.3	163.2	188.2	224.2	227.6	231.8	241.8	248.6	254.7
21529	92.9	136.8	170.1	194.9	210.8	228.6	232.4	250.0	258.8	258.0
21530	112.1	144.1	163.1	182.0	199.6	212.3	232.0	242.1	245.3	249.3
21531	93.3	137.9	176.8	206.8	224.7	245.8	260.3	277.0	283.0	288.8
21532	93.6	131.9	158.6	177.7	195.7	208.9	222.6	238.5	244.5	249.0
21533	99.3	145.5	173.6	197.0	228.3	250.8	266.6	278.9	287.6	298.2
MEAN	104.1	147.4	173.6	196.8	217.4	235.5	247.8	259.1	263.3	272.7
S.D.	11.22	11.65	12.65	15.15	18.68	22.00	21.69	24.80	26.02	26.99
N	28	28	28	28	28	28	28	28	28	28



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 1000.0 PPM

WEEK	7	8	9	10
ANIMAL				
21506	290.2	290.6	291.0	300.3
21507	251.7	256.3	258.5	264.3
21508	263.0	260.0	270.2	268.4
21509	250.3	257.5	257.5	259.7
21510	222.0	231.6	239.1	234.6
21511	281.1	287.2	301.4	305.5
21512	262.2	261.2	259.4	274.5
21513	261.3	268.8	273.0	275.4
21514	310.3	318.8	344.2	342.9
21515	287.2	290.1	305.9	303.5
21516	310.1	309.8	321.2	328.5
21517	251.5	260.4	268.8	267.2
21518	340.8	354.2	370.7	369.5
21519	343.0	335.8	342.6	355.1
21520	298.1	303.8	300.9	298.1
21521	267.6	276.3	274.2	275.5
21522	263.3	272.5	279.0	273.8
21523	305.0	304.8	307.9	309.7
21524	297.3	303.7	313.0	315.6
21525	281.9	293.3	307.7	306.8
21526	283.5	293.8	302.6	301.7
21527	255.3	264.8	265.0	267.7
21528	279.4	274.1	258.9	273.0
21529	261.8	265.7	281.1	278.0
21530	258.6	264.6	271.1	274.2
21531	303.0	318.8	322.2	319.6
21532	254.6	263.1	269.8	270.6
21533	302.3	305.6	314.4	312.3
MEAN	279.9	285.3	291.8	293.8
S.D.	28.04	27.56	31.07	31.03
N	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)									
	F1 ADULT FEMALES GROUP: 2000.0 PPM									
	-3	-2	-1	0	1	2	3	4	5	6
ANIMAL										
21534	97.1	141.1	177.7	200.9	226.6	244.9	250.1	267.7	270.0	275.4
21535	117.4	156.1	178.5	205.9	219.5	224.7	242.4	256.5	253.3	260.1
21536	91.2	124.7	148.1	166.1	179.8	191.7	202.6	213.5	214.5	217.0
21537	100.8	145.1	176.1	197.0	214.3	227.4	236.5	245.5	249.4	255.4
21538	106.8	144.2	163.2	184.1	205.6	209.9	212.9	225.3	232.4	235.1
21539	114.3	152.2	180.9	200.7	224.0	234.9	244.4	261.4	265.7	268.2
21540	90.7	133.6	169.7	188.1	204.4	224.7	219.7	238.0	247.8	249.7
21541	105.1	145.3	169.1	184.4	195.8	213.6	223.8	233.4	233.0	247.3
21542	100.0	135.3	164.3	186.8	200.4	218.7	230.7	239.1	247.8	269.1
21543	113.0	146.0	168.5	185.7	198.8	216.3	231.9	240.3	229.7	251.7
21544	116.2	164.7	182.5	213.6	237.0	251.2	254.0	273.9	277.1	289.6
21545	114.4	154.1	182.3	202.4	225.7	238.6	248.3	257.7	257.4	272.5
21546	93.7	130.3	162.0	183.2	203.0	220.7	230.1	239.7	240.7	255.8
21547	81.9	123.8	156.0	181.0	200.0	213.5	229.5	243.0	244.9	258.3
21548	90.4	135.1	169.4	195.0	209.8	233.8	251.6	263.0	258.9	275.1
21549	104.3	146.6	174.6	194.6	217.8	231.4	242.7	253.3	262.6	278.8
21550	93.5	130.5	166.1	188.3	203.2	218.5	242.9	257.7	256.7	276.9
21551	97.1	134.0	155.9	170.5	188.2	202.0	209.4	217.5	220.4	235.9
21552	85.6	129.6	163.0	188.2	208.8	227.1	235.6	253.5	263.1	273.4
21553	95.9	142.4	168.4	193.0	199.4	222.0	222.4	236.8	240.4	248.4
21554	99.9	133.0	158.3	171.0	182.8	197.1	209.9	219.8	216.6	224.2
21555	114.0	148.9	172.6	193.6	210.6	233.0	239.7	253.7	259.6	264.9
21556	109.7	143.5	167.1	188.4	205.2	219.4	236.0	245.9	249.7	255.0
21557	91.6	128.5	153.1	181.3	198.5	215.0	224.1	237.4	253.2	244.9
21558	89.8	126.8	158.0	181.5	202.8	214.8	233.9	249.9	251.9	258.9
21559	84.6	123.6	152.6	169.2	192.1	205.5	218.0	227.9	224.3	234.4
21560	90.8	130.4	160.0	173.5	192.7	205.1	214.5	216.0	229.5	236.5
21561	94.2	135.7	167.9	192.1	207.8	221.1	232.8	238.5	238.3	251.4
MEAN	99.4	138.8	166.6	187.9	205.5	220.6	231.1	243.1	246.0	255.8
S.D.	10.46	10.67	9.37	11.52	13.33	13.79	13.83	15.96	16.41	17.63
N	28	28	28	28	28	28	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

WEEK	INDIVIDUAL BODY WEIGHT (GRAMS)			
	7	8	9	10
ANIMAL				
21534	258.0	272.8	288.0	280.4
21535	264.8	276.6	281.0	279.0
21536	226.3	233.1	230.3	230.6
21537	253.6	262.9	268.3	267.2
21538	238.1	250.5	254.3	247.2
21539	273.3	282.8	292.2	284.4
21540	267.0	266.2	269.0	278.5
21541	257.2	257.6	259.7	263.9
21542	268.2	261.7	270.5	265.4
21543	266.1	272.4	267.9	272.3
21544	287.5	302.5	308.0	308.4
21545	283.8	279.9	289.6	293.1
21546	258.1	258.1	266.8	270.2
21547	256.2	269.9	266.5	277.7
21548	283.5	281.5	282.8	288.3
21549	283.3	284.0	298.2	301.3
21550	282.5	280.9	296.1	303.2
21551	239.8	242.1	247.2	251.9
21552	280.8	290.7	295.6	290.6
21553	259.2	263.0	262.4	262.1
21554	231.9	232.3	245.1	244.6
21555	273.2	272.0	282.9	281.8
21556	266.0	269.5	274.3	273.2
21557	249.6	253.1	246.6	257.3
21558	272.4	277.1	282.3	276.1
21559	234.3	241.4	247.3	239.1
21560	239.2	250.9	253.2	251.7
21561	259.7	241.6	260.3	269.3
MEAN	261.2	265.2	270.9	271.7
S.D.	17.34	17.60	19.22	19.35
N	28	28	28	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES GROUP: 0.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21450	17.4	17.9	16.8	17.7	18.9	18.5	18.0	18.3	17.0	16.9
21451	16.8	18.9	18.8	18.8	20.5	20.4	18.1	18.6	20.1	20.9
21452	17.8	17.7	18.7	18.9	21.4	21.7	20.7	19.8	20.7	21.5
21453	15.5	16.4	16.5	16.7	18.1	19.4	18.9	17.9	18.0	20.5
21454	15.8	17.5	17.6	18.3	19.4	r/s	r/s	19.8	22.2	r/s
21455	17.6	18.1	18.7	18.8	21.4	21.1	19.9	20.4	20.3	22.4
21456	17.1	17.3	17.1	17.5	r/s	19.0	20.0	20.1	21.5	20.1
21457	22.2	r	dead							
21458	16.7	17.8	18.5	19.1	21.1	18.9	19.5	18.4	20.8	18.6
21459	18.2	17.8	18.3	19.0	20.3	20.0	20.4	19.9	20.1	19.9
21460	16.8	17.8	18.2	18.5	21.1	22.4	21.8	20.8	21.3	21.0
21461	17.8	17.1	18.4	17.7	20.8	20.3	20.3	20.4	23.1	19.8
21462	18.5	18.7	20.1	18.6	23.6	22.9	22.5	22.1	22.1	23.4
21463	16.5	17.2	17.4	17.5	19.8	19.1	19.6	18.9	18.4	19.4
21464	15.8	16.6	18.9	18.6	21.8	21.4	19.0	19.7	17.9	19.6
21465	18.7	18.6	19.8	19.3	19.2	20.3	19.8	20.2	18.8	18.0
21466	16.3	16.7	18.2	18.0	18.7	18.9	18.9	18.0	17.9	17.2
21467	15.3	17.2	17.7	17.5	20.2	19.9	19.4	19.6	20.2	r/s
21468	16.8	17.6	18.8	19.5	20.7	21.3	20.4	19.5	18.1	21.2
21469	16.8	17.1	16.3	17.9	19.5	18.1	18.6	17.5	17.8	15.8
21470	15.6	16.1	18.5	17.5	20.0	20.6	20.7	21.3	20.8	20.1
21471	17.1	17.9	18.8	18.4	21.1	20.8	20.6	20.2	21.5	20.2
21472	17.4	18.7	18.8	21.8	21.3	23.0	21.8	21.3	r/s	r/s
21473	16.3	18.1	18.6	18.9	20.5	19.6	19.9	19.5	21.8	19.9
21474	16.9	18.2	19.3	20.0	20.6	20.6	20.6	22.7	21.1	20.6
21475	16.6	17.8	19.1	18.3	21.6	20.7	19.4	19.9	18.8	19.2
21476	17.5	18.0	18.6	17.3	19.5	19.1	18.4	18.1	17.5	18.1
21477	16.6	16.8	15.6	17.2	18.0	17.8	17.0	19.0	18.5	17.3
MEAN	17.1	17.6	18.2	18.4	20.4	20.2	19.8	19.7	19.9	19.6
S.D.	1.33	0.73	1.05	1.04	1.25	1.39	1.25	1.27	1.73	1.80
N	28	27	27	27	26	26	26	27	26	24

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 0.0 PPM

WEEK	8	9	10
ANIMAL			
21450	16.9	17.3	16.3
21451	17.4	17.6	20.3
21452	20.7	19.7	18.9
21453	16.9	17.1	16.4
21454	24.8	r/s	r/s
21455	20.8	21.2	21.8
21456	18.6	19.0	r/s
21458	19.4	17.3	19.9
21459	19.7	19.6	17.1
21460	19.9	19.1	20.1
21461	19.6	19.9	20.3
21462	21.5	19.7	19.6
21463	18.8	17.7	15.6
21464	16.5	18.1	18.8
21465	18.8	20.2	19.2
21466	17.6	16.8	16.8
21467	19.2	r/s	19.0
21468	19.8	19.0	20.5
21469	18.5	18.1	19.6
21470	18.3	19.2	19.8
21471	19.1	18.0	19.8
21472	r/s	r/s	20.9
21473	20.0	18.8	19.2
21474	19.9	21.9	20.7
21475	17.6	18.0	18.2
21476	17.3	16.3	17.9
21477	16.9	19.1	17.9
MEAN	19.0	18.7	19.0
S.D.	1.79	1.38	1.60
N	26	24	25

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES GROUP: 300.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21478	16.9	18.1	19.1	19.9	21.9	21.7	21.8	21.7	23.0	22.6
21479	17.1	17.2	18.1	18.4	21.4	19.9	19.8	19.3	19.9	18.7
21480	16.3	17.0	19.0	21.2	r/s	23.6	r/s	r/s	27.0	22.5
21481	19.1	20.8	21.6	19.3	21.6	21.6	20.0	20.3	23.3	21.7
21482	17.8	17.6	18.2	18.9	23.4	22.6	20.1	21.4	22.9	21.7
21483	17.4	19.5	22.1	22.3	25.4	r/s	r/s	22.5	23.0	r/s
21484	16.3	18.0	18.5	18.8	19.9	20.9	20.1	18.6	19.3	19.2
21485	16.1	16.7	18.0	18.4	20.7	r/s	21.4	20.2	20.7	21.6
21486	16.7	16.2	17.9	18.2	20.6	22.5	22.8	21.0	21.1	21.6
21487	9.9	15.0	17.5	17.6	20.1	21.1	19.2	19.5	20.0	20.2
21488	18.6	17.2	19.3	21.0	22.4	22.9	24.7	23.0	25.4	23.9
21489	14.4	12.5	r	dead						
21490	17.2	17.2	18.4	18.4	20.9	21.3	20.0	19.3	21.2	20.3
21491	18.3	18.5	18.9	20.0	22.2	22.4	22.2	22.8	20.9	21.0
21492	17.4	20.0	19.5	21.4	27.3	r/s	r/s	24.4	22.4	r/s
21493	16.7	17.4	17.8	17.9	18.3	18.4	18.4	18.1	17.7	17.0
21494	15.2	16.3	16.5	17.4	23.0	r/s	19.9	17.4	18.2	22.3
21495	19.7	21.0	22.1	21.4	24.1	25.2	24.1	23.8	26.0	25.0
21496	17.2	17.0	19.4	20.0	25.7	23.4	22.2	22.1	22.4	22.2
21497	17.3	16.1	17.6	16.9	19.1	18.2	18.2	16.6	17.6	17.6
21498	15.4	15.7	16.8	19.0	r/s	r/s	r/s	r/s	r/s	r/s
21499	12.9	14.3	15.2	15.1	16.7	17.4	16.9	17.4	17.3	19.0
21500	15.5	15.5	16.4	15.8	18.0	18.6	18.4	r/s	22.9	r/s
21501	16.6	16.0	16.5	18.1	20.4	21.6	19.0	19.7	18.9	21.2
21502	18.2	15.3	17.7	16.3	21.1	22.8	22.7	20.3	19.3	19.9
21503	16.4	18.6	19.6	20.2	21.5	20.3	21.2	21.0	21.7	21.4
21504	19.4	19.8	20.4	23.0	24.4	27.0	25.3	22.6	23.2	22.1
21505	16.9	18.0	18.6	19.4	23.1	22.2	22.3	21.6	20.8	21.0
MEAN	16.7	17.2	18.6	19.0	21.7	21.6	20.9	20.6	21.4	21.0
S.D.	1.99	1.95	1.68	1.93	2.50	2.28	2.18	2.11	2.54	1.88
N	28	28	27	27	25	22	23	24	26	23

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES GROUP: 300.0 PPM

WEEK	8	9	10
ANIMAL			
21478	20.6	19.9	20.4
21479	16.9	18.4	19.4
21480	19.4	r/s	r/s
21481	20.3	20.8	20.9
21482	20.3	19.8	18.3
21483	18.9	21.5	22.5
21484	21.5	21.6	18.1
21485	20.4	r/s	18.7
21486	21.2	20.9	20.8
21487	21.1	21.7	20.7
21488	23.3	20.8	22.1
21490	19.1	18.9	20.6
21491	21.7	21.5	21.8
21492	21.1	23.6	24.2
21493	18.1	16.9	18.4
21494	19.6	18.3	18.9
21495	22.9	23.0	22.2
21496	20.9	23.3	22.2
21497	18.6	16.9	17.4
21498	r/s	r/s	r/s
21499	18.4	18.1	18.1
21500	18.2	19.9	22.5
21501	20.1	19.8	19.9
21502	18.5	19.3	22.6
21503	21.3	21.8	21.9
21504	18.1	20.6	20.6
21505	20.7	r/s	20.9
MEAN	20.1	20.3	20.6
S.D.	1.56	1.85	1.79
N	26	23	25

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES GROUP: 1000.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21506	16.9	19.1	20.0	19.9	22.2	21.1	20.3	21.5	23.1	21.4
21507	16.1	16.8	17.0	16.7	19.0	18.5	17.2	18.2	18.3	18.4
21508	15.6	17.5	17.6	17.4	19.1	17.9	17.1	19.3	19.3	18.9
21509	16.0	17.3	18.4	17.4	19.6	19.2	18.9	18.3	21.0	18.4
21510	17.0	16.5	18.5	16.0	21.9	r/s	17.2	16.0	18.4	18.6
21511	16.9	18.2	18.8	19.3	21.4	20.9	21.0	21.5	21.9	20.5
21512	16.5	17.1	17.8	17.4	19.7	19.0	17.8	17.7	18.9	18.8
21513	15.9	17.4	17.4	16.9	18.4	19.6	18.5	17.3	20.3	19.1
21514	18.7	19.1	22.2	25.3	25.9	23.4	25.7	25.2	27.3	20.7
21515	17.2	17.9	18.5	19.8	22.5	21.0	21.7	22.1	20.7	20.2
21516	19.1	19.6	21.7	23.1	24.1	23.2	24.0	24.1	22.8	22.2
21517	16.4	16.7	18.3	18.7	18.9	19.6	21.2	17.8	19.7	17.5
21518	20.1	22.3	22.4	23.2	25.2	24.7	25.2	22.9	23.3	22.4
21519	16.6	17.1	18.5	19.2	26.1	22.9	24.4	24.7	24.3	25.1
21520	17.8	18.6	19.5	18.9	20.1	21.1	21.6	17.2	17.9	19.1
21521	14.2	14.4	16.2	17.3	17.7	20.8	18.5	17.1	19.1	19.9
21522	15.8	15.5	16.4	16.3	18.5	19.2	18.4	18.2	21.9	18.0
21523	17.4	19.3	19.8	21.9	21.2	20.6	22.6	21.7	22.1	19.9
21524	17.8	20.1	19.4	19.6	19.9	20.6	21.6	20.8	21.3	19.7
21525	16.1	16.8	18.5	18.7	20.3	21.0	21.0	20.7	20.9	21.0
21526	17.7	17.3	19.4	21.4	22.7	23.2	21.7	21.0	20.2	18.7
21527	17.7	17.5	18.4	18.0	18.1	19.0	18.8	18.5	18.7	18.2
21528	16.0	18.4	18.3	21.8	24.0	r/s	r/s	r/s	r/s	r/s
21529	15.4	17.3	18.3	20.9	19.9	r/s	20.1	20.0	20.2	r/s
21530	15.2	14.5	16.4	15.6	18.5	18.1	17.3	17.5	18.0	17.8
21531	16.1	19.0	20.3	19.7	23.2	21.7	21.4	21.4	21.6	22.5
21532	15.1	16.5	17.0	17.3	19.0	19.6	19.2	18.4	17.8	18.2
21533	17.2	18.2	20.3	21.5	24.1	23.2	23.3	23.0	21.9	20.5
MEAN	16.7	17.7	18.8	19.3	21.1	20.8	20.6	20.1	20.8	19.8
S.D.	1.28	1.65	1.63	2.43	2.51	1.84	2.53	2.55	2.22	1.79
N	28	28	28	28	28	25	27	27	27	26



TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 1000.0 PPM

WEEK	8	9	10
ANIMAL			
21506	20.8	21.2	22.0
21507	17.3	17.9	18.8
21508	17.0	19.0	19.1
21509	18.3	18.3	19.0
21510	18.0	r/s	15.6
21511	20.7	22.3	21.9
21512	17.4	18.9	20.5
21513	18.7	20.2	18.8
21514	22.1	26.1	24.4
21515	20.4	22.1	20.7
21516	21.5	22.3	22.0
21517	17.6	19.4	18.7
21518	24.4	24.0	23.3
21519	23.4	20.6	22.7
21520	16.0	18.9	19.6
21521	18.8	18.0	17.7
21522	17.9	17.6	17.7
21523	18.9	20.2	18.3
21524	19.5	21.0	21.5
21525	21.1	21.8	21.9
21526	19.4	19.8	19.9
21527	16.2	18.4	18.9
21528	r/s	r/s	24.7
21529	18.3	21.4	19.1
21530	17.1	17.7	18.3
21531	21.6	20.1	20.3
21532	18.5	18.5	18.4
21533	21.3	21.4	20.7
MEAN	19.3	20.3	20.2
S.D.	2.17	2.06	2.15
N	27	26	28

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES GROUP: 2000.0 PPM

WEEK	-2	-1	0	1	2	3	4	5	6	7
ANIMAL										
21534	16.8	18.2	19.5	20.4	22.0	21.6	21.9	22.0	21.8	12.7
21535	18.2	17.7	19.2	19.6	21.6	20.3	r/s	19.8	19.6	20.4
21536	15.5	14.9	15.9	15.2	17.5	17.5	17.0	15.9	16.2	16.6
21537	17.3	18.2	17.9	19.1	19.6	19.2	18.9	19.7	19.1	17.9
21538	15.8	15.4	16.7	16.5	17.8	17.7	17.3	17.4	17.3	17.7
21539	15.5	16.1	16.5	16.8	17.9	19.0	19.1	18.0	18.3	18.7
21540	15.2	17.2	17.5	16.4	19.5	16.6	18.1	18.8	18.3	18.3
21541	17.3	15.4	15.4	14.5	17.3	13.5	16.6	16.7	18.1	16.7
21542	16.4	17.1	17.2	18.0	18.9	18.7	19.3	19.1	20.3	19.0
21543	16.8	15.6	16.2	17.1	19.4	19.2	18.6	17.4	18.1	17.8
21544	17.7	18.0	19.4	20.0	21.5	21.2	21.4	20.4	20.9	20.7
21545	16.4	17.0	17.6	18.6	19.2	19.0	18.9	18.7	18.5	18.6
21546	14.9	16.1	16.8	15.6	17.7	17.0	17.1	17.1	16.9	16.5
21547	14.3	16.8	18.4	18.0	19.3	20.1	19.2	18.5	19.4	17.6
21548	16.5	18.3	18.9	18.9	22.2	21.9	22.1	r/s	25.3	23.4
21549	19.6	21.1	20.8	23.1	24.7	r/s	22.8	24.0	23.5	22.5
21550	14.7	17.2	17.5	17.6	19.6	21.0	20.6	19.8	22.4	20.1
21551	13.6	14.4	16.1	16.9	20.7	20.1	r/s	19.7	19.6	r/s
21552	15.0	17.2	18.3	17.6	19.7	19.8	20.3	20.9	20.6	21.3
21553	16.8	19.0	19.0	17.8	19.2	20.5	18.9	20.2	20.0	20.2
21554	16.2	16.0	15.6	15.6	17.2	17.8	18.0	17.2	15.2	18.5
21555	16.9	17.2	19.4	19.7	21.5	r/s	21.3	20.5	19.7	20.3
21556	16.3	16.2	16.6	17.5	19.5	20.5	19.4	18.4	19.8	19.1
21557	16.4	17.1	18.4	17.6	20.9	19.4	20.0	21.2	18.6	18.2
21558	14.9	17.0	18.0	18.7	18.5	20.7	20.4	19.2	19.9	21.0
21559	15.8	17.4	17.4	18.8	18.6	19.7	20.3	17.1	20.7	20.1
21560	14.3	16.3	17.2	17.1	17.5	18.2	16.8	18.8	17.7	17.9
21561	16.4	17.9	18.9	18.9	18.9	18.9	17.2	18.1	18.9	18.2
MEAN	16.1	17.0	17.7	17.9	19.6	19.2	19.3	19.1	19.5	18.9
S.D.	1.30	1.37	1.35	1.79	1.78	1.81	1.76	1.78	2.13	2.13
N	28	28	28	28	28	26	26	27	28	27

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 2000.0 PPM

WEEK	8	9	10
ANIMAL			
21534	18.6	21.0	19.8
21535	18.2	18.3	19.9
21536	16.4	15.9	16.2
21537	18.7	18.7	20.8
21538	18.5	17.0	16.0
21539	17.8	18.5	17.1
21540	17.6	16.4	18.2
21541	16.7	16.5	17.8
21542	15.7	17.1	17.2
21543	17.6	16.7	17.6
21544	20.7	19.8	19.7
21545	18.2	18.3	18.9
21546	16.1	16.7	16.5
21547	18.2	16.7	20.4
21548	r/s	r/s	26.1
21549	21.5	23.1	21.7
21550	21.1	21.3	20.1
21551	18.4	19.6	18.5
21552	19.4	19.1	19.3
21553	19.4	20.0	19.3
21554	17.2	18.8	17.3
21555	18.2	20.4	19.7
21556	17.0	18.1	18.5
21557	17.8	16.8	17.9
21558	18.3	17.9	18.0
21559	20.8	19.2	17.6
21560	19.1	16.9	17.1
21561	15.6	16.3	18.7
MEAN	18.2	18.3	18.8
S.D.	1.55	1.80	2.03
N	27	27	28

APPENDIX 4

Individual Animal Data: Reproductive Portions

(151 Pages)

	<u>Pages</u>
4A F0 Females at F1 Breed . . . . .	1-76
4B F1 Females at F2 Breed . . . . .	77-151

Food Consumption Abbreviations:

r/s = Value removed due to observed spillage.

r/a = Value removed due to addition of an unmeasured quantity of additional food.

a = Combined interval value removed due to removal of at least one individual interval value (see individual interval footnotes).

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
FO ADULT FEMALES GROUP: 0.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>a</sup>	MALE NO. AFTER SECOND SWITCH <sup>b</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
7529A01	7484A18			3-JUL-88	25-JUL-88	22	
7634A02	7389A22			1-JUL-88	23-JUL-88	22	
7505A03	7459A27			3-JUL-88	25-JUL-88	22	
7513A04	7384A13			1-JUL-88	23-JUL-88	22	
7517A05	7401A19			4-JUL-88	26-JUL-88	22	
7601A06	7480A26			2-JUL-88	24-JUL-88	22	
7503A07	7461A17			2-JUL-88	24-JUL-88	22	
7611A08	7335A06			30-JUN-88	22-JUL-88	22	
7605A09	7450A05			3-JUL-88	25-JUL-88	22	
7593A10	7458A04			2-JUL-88	24-JUL-88	22	
7512A11	7418A07			3-JUL-88	25-JUL-88	22	
7638A12	7345A10			2-JUL-88	24-JUL-88	22	
7628A13	7395A20			1-JUL-88	23-JUL-88	22	
7639A14	7444A12			30-JUN-88	22-JUL-88	22	
7618A15	7475A21			1-JUL-88	23-JUL-88	22	
7555A16	7387A01			30-JUN-88	22-JUL-88	22	
7609A17	7417A08			1-JUL-88	23-JUL-88	22	
7643A18	7383A03			2-JUL-88	24-JUL-88	22	
7635A19	7483A02			3-JUL-88	25-JUL-88	22	
7629A20	7455A14			3-JUL-88	25-JUL-88	22	
7620A21	7378A15			2-JUL-88	24-JUL-88	22	
7511A22	7341A23			30-JUN-88	22-JUL-88	22	
7619A23	7342A16			3-JUL-88	25-JUL-88	22	
7522A24	7464A24			3-JUL-88	25-JUL-88	22	
7563A25	7367A11			2-JUL-88	24-JUL-88	22	
7586A26	7482A09			30-JUN-88	22-JUL-88	22	
7531A27	7358A25			2-JUL-88	24-JUL-88	22	
7598A28	7336A28			3-JUL-88	25-JUL-88	22	

<sup>a</sup> Date of switch, July 6, 1988. No switches occurred because all pairs mated prior to this date.

<sup>b</sup> Date of switch, July 13, 1988. No switches occurred because all pairs mated prior to this date.

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
FO ADULT FEMALES GROUP: 300.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>c</sup>	MALE NO. AFTER SECOND SWITCH <sup>d</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
7621B01	7467B05			1-JUL-88	23-JUL-88	22	
7509B02	7473B27			1-JUL-88	23-JUL-88	22	
7532B03	7416B12			5-JUL-88	27-JUL-88	22	
7508B04	7453B24			1-JUL-88	23-JUL-88	22	
7538B05	7447B01			3-JUL-88	25-JUL-88	22	
7579B06	7347B14			4-JUL-88	26-JUL-88	22	
7537B07	7414B11			1-JUL-88	23-JUL-88	22	
7574B08	7430B13			30-JUN-88	22-JUL-88	22	
7627B09	7468B23			1-JUL-88	23-JUL-88	22	
7561B10	7371B16			30-JUN-88	22-JUL-88	22	
7608B11	7366B21			3-JUL-88	25-JUL-88	22	
7564B12	7393B09			1-JUL-88	23-JUL-88	22	
7630B13	7481B08			30-JUN-88	22-JUL-88	22	
7518B14	7462B28			1-JUL-88	23-JUL-88	22	
7585B15	7373B10			1-JUL-88	23-JUL-88	22	
7642B16	7405B20			18-JUL-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
7600B17	7339B04			2-JUL-88	24-JUL-88	22	
7603B18	7424B06			3-JUL-88	25-JUL-88	22	
7520B19	7425B02			1-JUL-88	23-JUL-88	22	
7541B20	7421B03			30-JUN-88	22-JUL-88	22	
7623B21	7477B18			2-JUL-88	24-JUL-88	22	
7631B22	7356B17			3-JUL-88	25-JUL-88	22	
7578B23	7446B07			2-JUL-88	24-JUL-88	22	
7527B24	7402B25			30-JUN-88	22-JUL-88	22	
7524B25	7388B26			3-JUL-88	25-JUL-88	22	
7552B26	7396B22			30-JUN-88	22-JUL-88	22	
7590B27	7354B19			30-JUN-88	22-JUL-88	22	
7566B28	7449B15			2-JUL-88	24-JUL-88	22	

<sup>c</sup> Date of switch, July 6, 1988. No switches occurred because all pairs (except one) mated prior to this date.

<sup>d</sup> Date of switch, July 13, 1988. No switches occurred because all pairs (except one) mated prior to this date.

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
FO ADULT FEMALES GROUP: 1000.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>a</sup>	MALE NO. AFTER SECOND SWITCH <sup>b</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
7550C01	7439C07			1-JUL-88	23-JUL-88	22	
7588C02	7427C15			3-JUL-88	25-JUL-88	22	
7556C03	7381C12			3-JUL-88	25-JUL-88	22	
7633C04	7385C25			30-JUN-88	21-JUL-88	21	
7533C05	7431C09			3-JUL-88	25-JUL-88	22	
7504C06	7478C11			3-JUL-88	25-JUL-88	22	
7582C07	7437C21			30-JUN-88	22-JUL-88	22	
7624C08	7340C02			30-JUN-88	22-JUL-88	22	
7542C09	7350C24			3-JUL-88	25-JUL-88	22	
7543C10	7363C27			3-JUL-88	25-JUL-88	22	
7572C11	7359C16			1-JUL-88	23-JUL-88	22	
7573C12	7429C05			30-JUN-88	22-JUL-88	22	
7616C13	7380C19			4-JUL-88	26-JUL-88	22	
7540C14	7400C03			1-JUL-88	23-JUL-88	22	
7617C15	7406C18			2-JUL-88	24-JUL-88	22	
7565C16	7391C17			1-JUL-88	23-JUL-88	22	
7516C17	7422C04			2-JUL-88	24-JUL-88	22	
7625C18	7399C20			30-JUN-88	23-JUL-88	23	
7626C19	7438C10			3-JUL-88	25-JUL-88	22	
7559C20	7346C01			30-JUN-88	22-JUL-88	22	
7546C21	7466C13			3-JUL-88	25-JUL-88	22	
7571C22	7452C22			2-JUL-88	24-JUL-88	22	
7606C23	7404C26			3-JUL-88	25-JUL-88	22	
7498C24	7451C08			2-JUL-88	24-JUL-88	22	
7615C25	7440C28			3-JUL-88	25-JUL-88	22	
7612C26	7428C06			3-JUL-88	25-JUL-88	22	
7589C27	7386C14			1-JUL-88	23-JUL-88	22	
7502C28	7472C23			3-JUL-88	25-JUL-88	22	

<sup>a</sup> Date of switch, July 6, 1988. No switches occurred because all pairs mated prior to this date.

<sup>b</sup> Date of switch, July 13, 1988. No switches occurred because all pairs mated prior to this date.

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
FO ADULT FEMALES GROUP: 2000.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>c</sup>	MALE NO. AFTER SECOND SWITCH <sup>d</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
7495D01	7351D03			3-JUL-88	25-JUL-88	22	
7539D02	7441D19			3-JUL-88	25-JUL-88	22	
7519D03	7454D15			2-JUL-88	24-JUL-88	22	
7515D04	7344D13			2-JUL-88	24-JUL-88	22	
7568D05	7436D04			2-JUL-88	24-JUL-88	22	
7636D06	7355D05			30-JUN-88	22-JUL-88	22	
7545D07	7348D01			30-JUN-88	22-JUL-88	22	
7575D08	7392D20			3-JUL-88	25-JUL-88	22	
7584D09	7443D10			3-JUL-88	25-JUL-88	22	
7610D10	7469D02			2-JUL-88	24-JUL-88	22	
7536D11	7412D22			3-JUL-88	25-JUL-88	22	
7591D12	7372D08			30-JUN-88	22-JUL-88	22	
7554D13	7410D07			3-JUL-88	25-JUL-88	22	
7557D14	7360D17			3-JUL-88	25-JUL-88	22	
7548D15	7362D28			3-JUL-88	25-JUL-88	22	
7569D16	7413D11			30-JUN-88	22-JUL-88	22	
7567D17	7397D25			20-JUL-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
7632D18	7403D12			1-JUL-88	23-JUL-88	22	
7528D19	7435D23			30-JUN-88	22-JUL-88	22	
7547D20	7465D27			1-JUL-88	23-JUL-88	22	
7549D21	7445D26			30-JUN-88	22-JUL-88	22	
7583D22	7434D06			4-JUL-88	26-JUL-88	22	
7523D23	7379D24			30-JUN-88	22-JUL-88	22	
7544D24	7460D18			1-JUL-88	23-JUL-88	22	
7637D25	7337D21			2-JUL-88	24-JUL-88	22	
7594D26	7476D16			30-JUN-88	22-JUL-88	22	
7596D27	7398D14			30-JUN-88	22-JUL-88	22	
7510D28	7390D09			3-JUL-88	25-JUL-88	22	

<sup>c</sup> Date of switch, July 6, 1988. No switches occurred because all pairs (except one) mated prior to this date.

<sup>d</sup> Date of switch, July 13, 1988. No switches occurred because all pairs (except one) mated prior to this date.



TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 0.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
7529A01 P		249.06	267.94	299.34	361.13			
7634A02 P		267.64	296.11	329.90	410.05			
7505A03 P		263.15	286.64	307.09	335.16			
7513A04 P		257.66	283.33	327.80	391.16			
7517A05 P		265.60	292.38	328.92	394.14			
7601A06 P		265.63	291.20	327.16	377.86			
7503A07 P		254.52	271.22	305.03	377.92			
7611A08 P		241.22		305.79	370.90			
7605A09 P		272.30	294.98	335.75	389.33			
7593A10 P		246.14	271.91	293.69	345.57			
7512A11 P		249.41	269.63	308.26	371.79			
7638A12 P		249.78	272.34	319.84	390.46			
7628A13 P		271.56	294.33	326.50	401.06			
7639A14 P		288.45		359.01	421.70			
7618A15 P		271.94	289.12	326.20	397.46			
7555A16 P		271.73		312.07	349.69			
7609A17 P		286.16	305.26	333.20	389.99			
7643A18 P		260.27	282.62	315.17	370.81			
7635A19 P		249.44	266.43	303.61	370.18			
7629A20 P		258.26	295.78	330.25	392.30			
7620A21 P		292.93	320.51	360.70	435.43			
7511A22 P		251.24		319.22	385.58			
7619A23 P		297.73	326.08	360.30	428.24			
7522A24 P		254.01	276.10	308.75	372.13			
7563A25 P		263.56	277.87	317.71	383.28			
7586A26 P		276.25		344.94	399.87			
7531A27 P		262.78	293.32	327.71	379.57			
7598A28 P		262.63	281.11	320.14	369.92			
MEAN		264.32	287.23	323.36	384.38			
S.D.		14.414	15.667	17.641	23.123			
N		28	23	28	28			

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 300.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
7621801 P		246.26	262.25	295.02	356.15			
7509802 P		263.19	284.87	326.23	398.43			
7532803 P		235.57	261.56	285.57	334.35			
7508804 P		287.76	308.60	352.75	415.73			
7538805 P		277.41	299.17	334.86	393.12			
7579806 P		255.29	279.75	313.04	387.87			
7537807 P		269.27	299.76	336.35	394.62			
7574808 P		268.47		329.61	390.41			
7627809 P		243.14	273.09	303.61	355.64			
7561810 P		278.80		329.71	382.78			
7608811 P		248.07	264.27	302.64	373.35			
7564812 P		254.81	275.09	309.34	355.13			
7630813 P		263.89		342.10	407.26			
7518814 P		253.60	277.11	309.32	366.68			
7585815 P		251.14	275.48	312.58	385.65			
7642816 NP		315.62	329.71	330.99	332.99	330.96	328.67	328.51
7600817 P		300.88	320.12	362.72	416.92			
7603818 P		280.84	306.95	334.10	397.94			
7520819 P		268.84	288.87	327.94	388.63			
7541820 P		304.10		368.61	442.13			
7623821 P		263.82	291.78	319.36	378.38			
7631822 P		276.56	295.59	319.50	378.77			
7578823 P		262.57	287.42	328.08	399.96			
7527824 P		289.90		332.12	398.77			
7524825 P		287.92	311.31	340.73	368.13			
7552826 P		275.69		325.38	395.89			
7590827 P		248.52		307.78	359.36			
7566828 P		241.66	260.07	295.70	357.31			
MEAN		266.59	286.16	323.88	384.42	0.00	0.00	0.00
S.D.		18.218	17.880	20.038	23.388	0.000	0.000	0.000
N		27	20	27	27	0	0	0

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)

FO ADULT FEMALES GROUP: 1000.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
7550C01 P		237.17	263.66	293.20	339.26			
7588C02 P		245.51	263.91	300.72	355.22			
7556C03 P		273.54	303.08	345.61	413.54			
7633C04 P		254.43		304.43	361.08			
7533C05 P		255.92	282.98	315.28	376.36			
7504C06 P		258.89	289.30	319.20	383.27			
7582C07 P		248.42		313.69	378.61			
7624C08 P		272.86		328.59	388.00			
7542C09 P		249.36	263.64	289.39	338.39			
7543C10 P		232.49	256.51	285.74	313.83			
7572C11 P		257.05	295.27	326.20	408.13			
7573C12 P		247.87		315.44	379.72			
7616C13 P		293.83	326.58	364.17	429.12			
7540C14 P		276.96	303.86	340.30	410.49			
7617C15 P		285.90	313.83	352.48	424.45			
7565C16 P		313.32	337.52	371.30	445.36			
7516C17 P		269.66	292.06	324.19	379.86			
7625C18 P		299.31		355.52	421.84			
7626C19 P		284.55	306.06	344.67	422.18			
7559C20 P		248.83		308.17	352.19			
7546C21 P		261.01	290.52	325.21	389.45			
7571C22 P		271.91	299.07	338.65	400.26			
7606C23 P		262.84	292.71	328.11	397.07			
7498C24 P		277.03	301.93	352.58	428.34			
7615C25 P		256.14	280.27	310.75	355.53			
7612C26 P		274.62	307.14	353.01	420.62			
7589C27 P		256.01	278.34	308.30	377.48			
7502C28 P		272.45	306.00	352.82	423.28			
MEAN		265.57	293.37	327.42	389.75			
S.D.		18.838	20.494	23.351	32.907			
N		28	22	28	28			

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 2000.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
7495D01 P		232.42	270.04	306.65	373.70			
7539D02 P		250.22	271.44	302.37	354.38			
7519D03 P		249.89	272.68	312.18	369.85			
7515D04 P		258.61	291.94	328.21	392.25			
7568D05 P		246.54	268.22	302.29	356.72			
7636D06 P		225.80		279.75	332.31			
7545D07 P		272.71		332.25	377.65			
7575D08 P		223.49	247.38	279.91	341.82			
7584D09 P		253.42	281.57	322.91	393.95			
7610D10 P		241.73	262.62	301.03	362.70			
7536D11 P		233.36	260.93	301.13	341.92			
7591D12 P		266.91		321.56	361.73			
7554D13 P		264.25	297.31	342.33	399.09			
7557D14 P		244.42	210.70	294.97	348.98			
7548D15 P		257.62	277.35	314.43	374.53			
7569D16 P		250.75		314.95	387.20			
7567D17 NP		289.65	262.72	275.20	283.54	280.76	288.40	289.85
7632D18 P		246.45	276.36	311.60	380.67			
7528D19 P		239.30		314.12	379.74			
7547D20 P		253.20	273.95	306.10	356.57			
7549D21 P		269.16		338.66	399.83			
7583D22 P		278.86	306.53	342.00	415.62			
7523D23 P		259.29		323.86	383.73			
7544D24 P		277.17	299.98	325.50	384.21			
7637D25 P		256.55	273.39	322.27	378.63			
7594D26 P		242.91		300.09	353.27			
7596D27 P		246.81		314.33	369.72			
7510D28 P		257.23	280.73	316.33	365.67			
MEAN		251.82	273.51	313.77	371.72	0.00	0.00	0.00
S.D.		14.363	21.402	16.162	19.937	0.000	0.000	0.000
N		27	18	27	27	0	0	0

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
7529A01	P	22		19.28	20.99	21.40	21.82	22.71	24.17					20.01	21.58
7634A02	P	22		22.20	23.15	25.53	23.35	25.14	26.07					22.61	24.60
7505A03	P	22		22.45	23.83	24.09	22.20	22.85	25.44					23.04	23.28
7513A04	P	22		19.79	21.20	22.87	26.29	26.09	27.99					20.40	24.34
7517A05	P	22		21.11	22.84	22.36	21.66	24.40	25.96					21.85	22.06
7601A06	P	22		20.78	22.53	23.54	23.78	23.73	25.69					21.52	23.64
7503A07	P	22		19.17	21.29	21.21	21.09	22.77	24.70					20.08	21.16
7611A08	P	22		16.70	19.15	19.75	20.30	22.58	24.31					17.75	19.98
7605A09	P	22		22.53	23.77	23.34	23.73	23.76	25.04					23.06	23.51
7593A10	P	22		20.28	22.19	22.76	21.72	21.01	24.95					21.09	22.31
7512A11	P	22		20.20	22.49	22.59	23.58	23.82	24.96					21.18	23.01
7638A12	P	22		21.14	21.12	23.91	23.96	24.87	25.31					21.13	23.93
7628A13	P	22		19.67	21.53	21.08	20.73	20.83	22.75					20.47	20.93
7639A14	P	22		19.66	20.93	22.91	25.23	23.61	24.73					20.20	23.91
7618A15	P	22		20.95	21.60	23.27	23.93	21.97	24.73					21.23	23.56
7555A16	P	22		19.41	20.39	20.76	21.87	22.75	22.74					19.83	21.23
7609A17	P	22		20.96	22.30	21.85	22.03	21.10	23.67					21.53	21.93
7643A18	P	22		18.71	19.37	20.70	22.44	22.40	23.42					18.99	21.45
7635A19	P	22		19.63	21.87	22.67	23.33	24.36	25.57					20.59	22.95
7629A20	P	22		20.85	23.49	22.96	22.17	24.41	27.50					21.98	22.62
7620A21	P	22		26.02	26.65	27.72	27.19	26.61	27.34					26.29	27.50
7511A22	P	22		21.32	21.76	22.17	23.83	24.64	25.14					21.51	22.88
7619A23	P	22		23.83	25.31	26.86	27.20	27.13	29.84					24.46	27.00
7522A24	P	22		20.51	22.34	21.85	20.60	22.96	19.78					21.30	21.31
7563A25	P	22		21.05	22.01	22.79	23.82	23.73	25.72					21.46	23.23
7586A26	P	22		22.36	22.50	24.01	24.77	24.17	25.94					22.42	24.33
7531A27	P	22		21.80	25.41	25.43	24.34	24.28	27.40					23.35	24.96
7598A28	P	22		19.22	21.01	20.66	21.10	21.07	23.17					19.99	20.85
MEAN				20.77	22.25	22.89	23.15	23.56	25.14					21.40	23.00
S.D.				1.767	1.694	1.853	1.869	1.620	1.927					1.690	1.758
N				28	28	28	28	28	28					28	28

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F0 ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
7621B01	P	22		20.54	21.60	23.95	22.93	25.17	25.82					20.99	23.51
7509B02	P	22		18.74	20.80	22.67	25.60	25.70	28.40					19.62	23.93
7532B03	P	22		20.12	21.72	21.79	21.46	21.98	23.50					20.80	21.65
7508B04	P	22		21.91	22.00	24.95	24.87	23.80	24.25					21.95	24.91
7538B05	P	22		19.81	20.32	22.16	22.27	22.29	24.42					20.03	22.20
7579B06	P	22		19.10	19.43	19.48	20.33	22.21	25.29					19.24	19.84
7537B07	P	22		20.92	23.53	24.18	24.50	23.97	24.77					22.04	24.31
7574B08	P	22		22.07	23.94	23.14	22.17	22.80	23.37					22.87	22.72
7627B09	P	22		20.83	22.57	23.20	21.57	21.53	23.38					21.57	22.50
7561B10	P	22		20.17	19.75	19.73	23.80	23.37	24.62					19.99	21.47
7608B11	P	22		19.53	19.87	20.00	21.97	24.25	25.52					19.68	20.84
7564B12	P	22		20.43	20.50	21.30	22.23	22.60	22.60					20.46	21.70
7630B13	P	22		22.79	25.49	r/s	25.17	23.13	24.27					23.95	a
7518B14	P	22		18.88	20.07	21.28	22.40	22.43	23.67					19.39	21.76
7585B15	P	22		20.17	22.67	24.13	24.10	24.23	26.09					21.24	24.11
7642B16	NP			22.67	25.28	24.54	19.76	19.91	20.63	15.60	18.96	17.01	18.40	23.79	22.49
7600B17	P	22		21.24	22.25	24.30	23.92	23.05	22.90					21.68	24.14
7603B18	P	22		20.89	22.43	24.02	21.60	24.88	28.88					21.55	22.98
7520B19	P	22		20.59	21.57	22.43	23.83	24.07	24.72					21.01	23.03
7541B20	P	22		23.71	24.64	24.96	27.00	27.60	28.36					24.11	25.83
7623B21	P	22		23.23	25.29	23.93	24.00	23.44	24.16					24.11	23.96
7631B22	P	22		19.15	21.44	22.30	21.57	21.64	23.84					20.13	21.99
7578B23	P	22		20.44	21.30	20.94	22.83	21.87	24.56					20.80	21.75
7527B24	P	22		18.35	18.74	17.51	20.30	20.13	22.47					18.51	18.70
7524B25	P	22		20.72	21.29	22.61	22.00	22.53	24.70					20.96	22.35
7552B26	P	22		19.26	20.28	20.68	21.00	21.57	23.85					19.70	20.82
7590B27	P	22		24.47	24.06	24.86	25.57	24.93	25.09					24.29	25.16
7566B28	P	22		18.99	21.33	21.46	21.70	23.55	23.46					20.00	21.56
MEAN				20.63	21.81	22.38	22.99	23.29	24.70					21.14	22.61
S.D.				1.562	1.783	1.915	1.721	1.558	1.657					1.597	1.672
N				27	27	26	27	27	27					27	26

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
7550C01	P	22		20.34	20.63	20.77	21.13	21.33	21.25					20.47	20.93
7588C02	P	22		17.89	18.28	19.78	19.77	21.00	23.65					18.06	19.77
7556C03	P	22		21.17	22.83	24.16	22.70	24.01	26.80					21.88	23.54
7633C04	P	21		19.57	20.79	21.07	25.23	25.87	26.78					20.09	22.86
7533C05	P	22		22.85	21.25	23.73	21.67	22.97	24.40					22.17	22.85
7504C06	P	22		21.63	22.52	24.10	19.93	23.31	25.41					22.01	22.31
7582C07	P	22		21.58	22.25	22.31	22.83	23.37	24.91					21.87	22.54
7624C08	P	22		20.90	21.34	22.09	22.37	20.70	23.53					21.09	22.21
7542C09	P	22		21.08	20.51	21.40	21.43	22.95	24.42					20.84	21.42
7543C10	P	22		22.42	22.76	24.21	23.87	24.10	26.94					22.57	24.06
7572C11	P	22		23.49	24.47	24.60	24.03	24.90	26.62					23.91	24.36
7573C12	P	22		21.94	22.47	21.86	21.93	25.53	25.83					22.17	21.89
7616C13	P	22		21.35	21.57	23.77	22.70	21.81	24.22					21.44	23.31
7540C14	P	22		20.73	20.93	20.55	19.73	21.40	23.11					20.82	20.20
7617C15	P	22		21.64	23.30	23.68	23.02	22.82	25.53					22.35	23.39
7565C16	P	22		20.64	22.13	21.78	24.30	23.77	24.55					21.28	22.86
7516C17	P	22		19.80	19.71	21.09	5.73	21.34	23.47					19.76	14.51
7625C18	P	23		19.87	21.33	21.62	22.27	21.47	25.00					20.50	21.90
7626C19	P	22		22.04	21.20	22.74	22.87	25.03	28.80					21.68	22.79
7559C20	P	22		21.52	23.68	23.73	24.63	22.67	25.27					22.44	24.11
7546C21	P	22		21.92	22.88	22.15	22.33	25.77	26.46					22.33	22.23
7571C22	P	22		20.24	21.81	23.73	23.49	24.45	24.93					20.91	23.62
7606C23	P	22		24.57	24.09	24.69	23.83	23.60	26.45					24.37	24.32
7498C24	P	22		21.82	21.58	24.26	26.45	27.79	29.79					21.72	25.20
7615C25	P	22		19.53	20.79	20.67	20.73	21.57	23.47					20.07	20.70
7612C26	P	22		20.67	21.45	23.15	22.80	25.07	26.52					21.01	23.00
7589C27	P	22		19.15	21.60	20.90	20.03	20.33	23.40					20.20	20.53
7502C28	P	22		23.85	25.72	25.48	25.37	26.63	28.09					24.65	25.43
MEAN				21.22	21.92	22.65	22.04	23.41	25.34					21.52	22.39
S.D.				1.460	1.508	1.542	3.637	1.940	1.871					1.404	2.109
N				28	28	28	28	28	28					28	28

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
7495D01	P	22		21.60	23.45	24.65	21.83	24.17	26.05					22.39	23.45
7539D02	P	22		19.93	21.12	22.78	22.53	23.80	24.93					20.44	22.68
7519D03	P	22		20.28	22.34	23.38	24.32	23.71	25.68					21.16	23.78
7515D04	P	22		23.21	26.38	25.51	22.54	22.61	24.84					24.57	24.24
7568D05	P	22		18.49	19.24	18.87	20.92	21.20	22.75					18.81	19.75
7636D06	P	22		20.31	21.03	20.50	19.77	20.27	20.83					20.62	20.18
7545D07	P	22		23.58	24.71	25.91	25.97	24.67	25.43					24.06	25.93
7575D08	P	22		18.33	18.97	18.34	19.37	19.87	23.16					18.60	18.78
7584D09	P	22		22.04	24.18	24.34	22.33	23.87	25.28					22.95	23.48
7610D10	P	22		20.94	21.82	23.85	25.08	25.60	28.41					21.32	24.38
7536D11	P	22		19.83	19.78	20.61	21.23	23.47	23.35					19.81	20.88
7591D12	P	22		21.56	23.76	22.54	24.07	22.33	23.87					22.50	23.19
7554D13	P	22		23.38	25.92	26.43	24.17	26.00	27.58					24.47	25.46
7557D14	P	22		8.75	10.67	19.25	23.40	27.77	23.51					9.57	21.03
7548D15	P	22		19.81	19.63	21.22	21.30	23.73	25.45					19.74	21.25
7569D16	P	22		20.32	20.86	22.15	21.87	23.27	26.10					20.55	22.03
7567D17	NP			16.01	16.62	17.74	18.42	20.46	19.22	17.61	17.01	18.46	18.57	16.27	18.03
7632D18	P	22		20.26	21.53	21.00	21.27	21.90	22.53					20.80	21.11
7528D19	P	22		22.36	22.68	23.15	23.40	24.47	25.43					22.50	23.26
7547D20	P	22		18.06	18.87	19.75	19.20	19.63	22.52					18.41	19.51
7549D21	P	22		21.54	23.11	22.51	21.70	22.17	24.20					22.21	22.16
7583D22	P	22		21.25	23.03	21.72	22.07	23.65	27.13					22.01	21.87
7523D23	P	22		21.23	21.97	21.51	21.27	22.97	25.23					21.55	21.40
7544D24	P	22		19.51	19.70	19.67	19.53	19.30	23.14					19.59	19.61
7637D25	P	22		20.02	21.35	19.80	23.58	26.47	28.06					20.59	21.42
7594D26	P	22		19.68	21.57	20.82	21.03	21.67	22.60					20.49	20.91
7596D27	P	22		23.19	23.57	23.29	24.03	24.27	24.57					23.36	23.61
7510D28	P	22		22.52	22.60	24.38	23.97	25.97	24.57					22.55	24.20
MEAN				20.44	21.62	22.15	22.29	23.29	24.71					20.95	22.21
S.D.				2.793	2.964	2.219	1.783	2.130	1.839					2.836	1.875
N				27	27	27	27	27	27					27	27

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN



TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	PS	GDD	DAY 14-20
7529A01	P	22	23.44
7634A02	P	22	25.60
7505A03	P	22	24.14
7513A04	P	22	27.04
7517A05	P	22	25.18
7601A06	P	22	24.71
7503A07	P	22	23.73
7611A08	P	22	23.44
7605A09	P	22	24.40
7593A10	P	22	22.98
7512A11	P	22	24.39
7638A12	P	22	25.09
7628A13	P	22	21.79
7639A14	P	22	24.17
7618A15	P	22	23.35
7555A16	P	22	22.75
7609A17	P	22	22.39
7643A18	P	22	22.91
7635A19	P	22	24.97
7629A20	P	22	25.95
7620A21	P	22	26.98
7511A22	P	22	24.89
7619A23	P	22	28.49
7522A24	P	22	21.37
7563A25	P	22	24.73
7586A26	P	22	25.05
7531A27	P	22	25.84
7598A28	P	22	22.12
MEAN			24.35
S.D.			1.657
N			28

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	PS	GDD	DAY 14-20
7621B01	P	22	25.50
7509B02	P	22	27.05
7532B03	P	22	22.74
7508B04	P	22	24.03
7538B05	P	22	23.36
7579B06	P	22	23.75
7537B07	P	22	24.37
7574B08	P	22	23.09
7627B09	P	22	22.46
7561B10	P	22	23.99
7608B11	P	22	24.89
7564B12	P	22	22.60
7630B13	P	22	23.70
7518B14	P	22	23.05
7585B15	P	22	25.16
7642B16	NP		20.27
7600B17	P	22	22.98
7603B18	P	22	26.88
7520B19	P	22	24.39
7541B20	P	22	27.98
7623B21	P	22	23.80
7631B22	P	22	22.74
7578B23	P	22	23.21
7527B24	P	22	21.30
7524B25	P	22	23.62
7552B26	P	22	22.71
7590B27	P	22	25.01
7566B28	P	22	23.50
MEAN			23.99
S.D.			1.519
N			27

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
 F0 ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	PS	GDD	DAY 14-20
7550C01	P	22	21.29
7588C02	P	22	22.33
7556C03	P	22	25.41
7633C04	P	21	26.32
7533C05	P	22	23.68
7504C06	P	22	24.36
7582C07	P	22	24.14
7624C08	P	22	22.11
7542C09	P	22	23.69
7543C10	P	22	25.52
7572C11	P	22	25.76
7573C12	P	22	25.68
7616C13	P	22	23.01
7540C14	P	22	22.26
7617C15	P	22	24.18
7565C16	P	22	24.16
7516C17	P	22	22.41
7625C18	P	23	23.23
7626C19	P	22	26.91
7559C20	P	22	23.97
7546C21	P	22	26.11
7571C22	P	22	24.69
7606C23	P	22	25.03
7498C24	P	22	28.79
7615C25	P	22	22.52
7612C26	P	22	25.79
7589C27	P	22	21.86
7502C28	P	22	27.36
MEAN			24.38
S.D.			1.841
N			28

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
 P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
 mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	PS	GDD	DAY	14-20
7495D01	P	22		25.11
7539D02	P	22		24.37
7519D03	P	22		24.69
7515D04	P	22		23.72
7568D05	P	22		21.98
7636D06	P	22		20.55
7545D07	P	22		25.05
7575D08	P	22		21.52
7584D09	P	22		24.57
7610D10	P	22		27.01
7536D11	P	22		23.41
7591D12	P	22		23.10
7554D13	P	22		26.79
7557D14	P	22		25.64
7548D15	P	22		24.59
7569D16	P	22		24.68
7567D17	NP			19.84
7632D18	P	22		22.22
7528D19	P	22		24.95
7547D20	P	22		21.08
7549D21	P	22		23.18
7583D22	P	22		25.39
7523D23	P	22		24.10
7544D24	P	22		21.22
7637D25	P	22		27.27
7594D26	P	22		22.13
7596D27	P	22		24.42
7510D28	P	22		25.27
MEAN				24.00
S.D.				1.818
N				27

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
7529A01	288.55	294.86	302.46	286.01
7634A02	291.21	296.49	311.36	295.69
7505A03	294.71	300.37	310.31	301.16
7513A04	300.21	297.99	310.79	299.57
7517A05	310.26	325.15	346.79	331.49
7601A06	303.88	301.75	306.32	291.37
7503A07	280.62	304.10	310.57	315.25
7611A08	289.48	307.73	327.09	317.31
7605A09	315.87	311.10	324.51	303.48
7593A10	283.10	280.46	291.02	293.32
7512A11	277.80	294.34	310.39	296.79
7638A12	286.62	304.20	314.79	298.43
7628A13	290.55	323.17	333.29	325.80
7639A14	329.37	325.90	354.11	323.38
7618A15	300.59	286.90	310.78	310.81
7555A16	293.78	314.59	323.36	313.73
7609A17	308.66	324.78	323.11	327.99
7643A18	281.56	307.43	313.44	309.72
7635A19	268.49	279.90	304.64	294.08
7629A20	299.16	307.00	321.64	318.34
7620A21	313.27	321.67	313.37	335.08
7511A22	291.36	318.77	328.16	323.54
7619A23	340.80	324.20	330.72	313.83
7522A24	269.02	300.50	314.78	301.21
7563A25	296.08	302.08	319.35	313.77
7586A26	329.52	326.55	329.99	314.45
7531A27	303.62	319.97	335.65	321.35
7598A28	260.90	298.80	312.03	302.49
MEAN	296.39	307.17	319.10	309.98
S.D.	18.650	13.747	13.542	13.193
N	28	28	28	28

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
7621B01	280.37	292.52	309.86	286.03
7509B02	319.50	310.55	313.67	303.53
7532B03	260.76	281.97	302.20	284.51
7508B04	337.58	320.27	329.12	315.94
7538B05	300.50	293.00	302.63	291.77
7579B06	280.11	292.16	320.45	307.11
7537B07	327.31	322.83	326.38	303.35
7574B08	291.85	305.53	322.55	302.73
7627B09	278.25	300.42	315.01	292.58
7561B10	307.30	318.51	328.33	318.05
7608B11	280.11	283.50	301.97	291.47
7564B12	282.02	287.22	292.90	286.70
7630B13	300.24	321.04	340.96	328.95
7518B14	285.93	286.89	306.54	298.29
7585B15	299.99	307.98	332.68	319.54
7600B17	326.06	328.36	342.72	319.84
7603B18	316.44	312.60	335.39	317.59
7520B19	303.43	312.00	329.19	312.56
7541B20	347.42	352.82	364.40	347.26
7623B21	279.04	297.15	319.69	302.86
7631B22	297.15	309.90	318.42	307.59
7578B23	280.59	306.68	316.24	313.59
7527B24	308.15	331.20	342.02	340.27
7524B25	330.58	330.40	339.52	327.73
7552B26	296.42	305.19	320.73	319.65
7590B27	287.31	310.38	333.68	317.65
7566B28	267.30	282.12	293.27	288.27
MEAN	298.95	307.53	322.24	309.09
S.D.	22.030	17.423	16.739	16.446
N	27	27	27	27

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
FO ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
7550C01	278.94	294.70	291.21	292.50
7588C02	269.94	279.30	291.78	286.28
7556C03	296.89	313.20	330.47	321.74
7633C04	285.08	299.26	316.86	316.04
7533C05	278.00	308.90	329.63	310.89
7504C06	302.65	302.10	314.63	298.12
7582C07	292.79	318.02	339.64	323.95
7624C08	295.30	318.56	341.32	322.00
7542C09	264.69	282.20	300.86	294.69
7543C10	284.00	286.90	293.27	284.16
7572C11	305.24	321.70	328.98	326.36
7573C12	295.99	313.12	320.35	328.57
7616C13	318.54	314.75	344.27	320.52
7540C14	300.72	320.70	335.45	314.96
7617C15	323.23	325.09	344.15	342.58
7565C16	354.00	342.40	343.70	323.99
7516C17	295.16	307.89	341.43	335.15
7625C18	334.60	338.90	348.47	325.30
7626C19	323.21	321.80	326.00	330.86
7559C20	292.87	314.49	328.60	328.92
7546C21	290.15	308.90	328.50	322.97
7571C22	305.66	320.76	354.02	332.83
7606C23	296.77	307.10	329.10	320.39
7498C24	309.71	321.67	348.07	337.49
7615C25	300.34	294.00	314.50	305.03
7612C26	295.15	312.20	338.30	350.24
7589C27	266.21	280.40	294.18	309.63
7502C28	307.24	329.50	356.10	348.23
MEAN	298.68	310.66	327.64	319.80
S.D.	19.911	16.258	19.267	17.278
N	28	28	28	28

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
F0 ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
7495D01	273.18	292.80	311.90	318.89
7539D02	269.40	292.60	318.30	305.53
7519D03	274.58	294.33	297.65	306.74
7515D04	294.52	300.34	315.39	313.17
7568D05	270.73	311.02	327.53	312.30
7636D06	256.86	283.66	296.20	309.12
7545D07	310.66	319.53	335.70	333.73
7575D08	246.53	282.00	297.80	293.13
7584D09	276.00	311.00	327.30	320.66
7610D10	272.40	281.91	318.62	310.13
7536D11	277.05	291.60	310.60	323.22
7591D12	309.94	315.43	317.30	325.03
7554D13	316.77	323.10	352.10	374.13
7557D14	288.69	315.90	340.80	340.50
7548D15	269.38	308.90	320.60	337.52
7569D16	260.71	305.62	324.80	315.82
7632D18	287.72	321.30	342.44	346.83
7528D19	286.04	305.53	321.30	341.20
7547D20	263.15	299.30	328.74	338.13
7549D21	311.70	323.30	334.40	324.90
7583D22	325.13	342.33	363.30	358.90
7523D23	292.17	322.61	344.80	343.74
7544D24	271.87	316.20	316.58	332.20
7637D25	307.78	329.77	350.66	361.42
7594D26	256.14	273.65	293.80	302.76
7596D27	283.74	312.55	325.00	327.79
7510D28	292.06	303.10	340.10	344.60
MEAN	283.14	306.64	324.95	328.23
S.D.	20.420	16.450	17.838	19.542
N	27	27	27	27



TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F0 ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
7529A01	24.05	38.18	46.34	53.41	30.11	50.38
7634A02	21.17	26.44	34.79	42.11	23.43	38.97
7505A03	20.64	36.34	43.40	45.26	27.37	44.46
7513A04	19.22	36.48	45.35	55.38	26.62	51.08
7517A05	34.49	39.46	50.42	62.69	36.62	57.43
7601A06	15.44	30.07	36.91	43.76	21.71	40.82
7503A07	28.40	37.19	44.94	51.94	32.16	48.94
7611A08	27.39	37.42	47.47	57.72	31.69	53.33
7605A09	21.52	33.93	42.68	45.23	26.84	44.14
7593A10	19.26	34.53	42.99	48.60	25.81	46.19
7512A11	26.48	39.60	48.09	56.98	32.10	53.17
7638A12	27.48	36.90	46.19	55.90	31.52	51.74
7628A13	37.03	43.39	54.57	59.39	39.75	57.33
7639A14	21.16	31.90	50.90	61.81	25.76	57.14
7618A15	19.93	32.70	44.02	57.71	25.40	51.84
7555A16	17.19	32.38	37.42	46.25	23.70	42.47
7609A17	21.40	37.35	44.99	53.58	28.23	49.90
7643A18	31.61	41.23	53.15	63.64	35.73	59.14
7635A19	29.21	38.69	48.24	56.30	33.27	52.85
7629A20	27.63	39.22	43.69	52.13	32.60	48.51
7620A21	30.54	38.93	50.20	58.17	34.14	54.76
7511A22	34.44	40.71	56.49	60.00	37.13	58.50
7619A23	20.74	36.83	46.34	56.96	27.64	52.41
7522A24	33.68	43.23	51.36	46.90	37.77	48.81
7563A25	25.29	35.96	45.54	54.58	29.86	50.71
7586A26	21.47	33.81	42.13	49.07	26.76	46.10
7531A27	24.81	42.01	55.53	61.38	32.18	58.87
7598A28	19.25	36.05	45.54	53.48	26.45	50.07
MEAN	25.03	36.82	46.42	53.94	30.08	50.72
S.D.	5.794	3.922	5.299	6.069	4.733	5.470
N	28	28	28	28	28	28

TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
7621B01	25.88	37.14	48.33	56.74	30.70	53.14
7509B02	15.27	31.35	39.28	50.57	22.16	45.73
7532B03	28.53	39.20	46.47	53.33	33.11	50.39
7508B04	18.74	30.20	41.86	50.05	23.65	46.54
7538B05	19.45	33.57	45.81	49.80	25.50	48.09
7579B06	23.59	45.23	57.39	64.19	32.86	61.28
7537B07	16.52	32.15	40.88	46.82	23.21	44.27
7574B08	23.53	35.21	48.35	54.49	28.54	51.86
7627B09	26.51	41.57	48.99	54.92	32.96	52.38
7561B10	27.51	36.28	46.17	54.76	31.27	51.08
7608B11	30.26	33.82	44.59	48.48	31.79	46.81
7564B12	20.35	34.87	46.56	52.36	26.57	49.88
7630B13	24.18	37.52	44.80	57.08	29.90	51.82
7518B14	20.65	32.48	40.33	48.05	25.72	44.74
7585B15	22.20	34.88	51.54	56.85	27.63	54.57
7600B17	22.71	36.87	45.09	56.03	28.78	51.34
7603B18	20.70	40.64	52.39	56.83	29.25	54.93
7520B19	26.96	36.26	49.42	56.50	30.95	53.47
7541B20	25.39	37.96	45.79	54.58	30.78	50.81
7623B21	26.66	39.74	50.73	55.53	32.26	53.47
7631B22	30.43	40.35	51.86	56.90	34.68	54.74
7578B23	31.64	41.74	50.46	58.17	35.97	54.86
7527B24	24.17	39.64	50.63	55.06	30.80	53.16
7524B25	17.94	31.94	39.67	44.03	23.94	42.16
7552B26	25.60	36.68	49.14	56.98	30.35	53.62
7590B27	19.73	42.68	50.20	59.50	29.57	55.52
7566B28	25.88	38.51	49.64	59.37	31.30	55.20
MEAN	23.74	36.98	47.27	54.37	29.42	51.33
S.D.	4.297	3.791	4.357	4.419	3.584	4.240
N	27	27	27	27	27	27

TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
FO ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
7550C01	18.00	38.73	41.92	48.97	26.88	45.95
7588C02	29.52	37.83	42.25	52.31	33.08	47.99
7556C03	22.02	36.55	49.65	56.83	28.24	53.75
7633C04	25.69	33.49	41.81	48.29	29.04	45.51
7533C05	32.05	39.67	47.78	61.18	35.32	55.44
7504C06	24.46	36.51	42.24	51.01	29.63	47.25
7582C07	26.63	38.50	46.83	57.04	31.71	52.66
7624C08	28.06	37.78	49.49	56.62	32.23	53.57
7542C09	25.08	38.39	50.10	54.96	30.78	52.88
7543C10	17.82	31.46	36.41	39.08	23.67	37.94
7572C11	29.44	43.76	51.38	64.72	35.58	59.00
7573C12	20.76	40.16	47.44	55.69	29.07	52.15
7616C13	27.82	33.06	46.51	54.06	30.07	50.82
7540C14	27.96	38.11	47.22	57.08	32.31	52.85
7617C15	26.55	36.60	45.34	56.68	30.85	51.82
7565C16	21.09	30.81	39.31	45.90	25.25	43.08
7516C17	24.99	36.92	45.04	56.37	30.11	51.52
7625C18	24.43	35.91	45.92	53.30	29.35	50.14
7626C19	33.09	36.31	48.60	58.45	34.47	54.23
7559C20	21.12	36.56	46.08	53.77	27.74	50.48
7546C21	30.56	39.76	48.66	56.87	34.51	53.35
7571C22	24.62	35.90	47.64	57.87	29.45	53.48
7606C23	28.81	37.48	47.55	53.11	32.53	50.73
7498C24	26.51	33.45	46.03	55.60	29.49	51.50
7615C25	20.13	36.62	45.03	52.80	27.20	49.47
7612C26	23.60	41.65	49.16	57.75	31.33	54.07
7589C27	16.57	33.09	43.23	50.79	23.65	47.55
7502C28	28.14	41.73	55.23	65.58	33.97	61.15
MEAN	25.20	37.03	46.21	54.74	30.27	51.08
S.D.	4.298	3.061	3.853	5.326	3.205	4.602
N	28	28	28	28	28	28

TABLE 5  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
 FO ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
7495D01	28.79	40.50	48.21	54.13	33.81	51.59
7539D02	30.93	42.99	51.14	62.38	36.10	57.56
7519D03	21.39	32.77	38.71	46.37	26.27	43.09
7515D04	22.32	32.21	42.53	49.29	26.56	46.40
7568D05	29.78	40.53	46.62	55.59	34.39	51.74
7636D06	25.89	36.95	46.99	54.35	30.63	51.20
7545D07	19.30	33.96	44.17	50.95	25.58	48.04
7575D08	24.35	39.50	51.13	54.64	30.84	53.13
7584D09	32.26	35.64	47.69	55.97	33.71	52.42
7610D10	28.76	36.20	47.15	59.37	31.95	54.13
7536D11	25.15	41.13	42.02	49.87	32.00	46.50
7591D12	15.79	27.68	32.42	38.73	20.89	36.02
7554D13	27.58	45.06	51.49	61.11	35.07	56.99
7557D14	28.60	35.96	47.80	58.85	31.75	54.12
7548D15	26.70	43.73	52.95	54.43	34.00	53.79
7569D16	25.95	39.58	48.82	56.48	31.79	53.19
7632D18	30.50	41.61	47.73	55.06	35.26	51.92
7528D19	29.52	38.96	51.09	58.97	33.56	55.60
7547D20	25.76	41.79	53.43	61.53	32.63	58.06
7549D21	22.94	35.31	44.25	52.35	28.24	48.88
7583D22	29.67	46.41	52.69	55.75	36.84	54.44
7523D23	28.50	41.42	52.85	60.35	34.04	57.14
7544D24	27.23	36.80	47.17	52.18	31.33	50.03
7637D25	30.77	36.59	48.05	57.08	33.27	53.21
7594D26	21.82	33.30	38.00	47.20	26.74	43.26
7596D27	26.34	39.46	46.17	53.00	31.96	50.07
7510D28	34.42	40.96	53.01	63.90	37.22	59.23
MEAN	26.70	38.41	47.20	54.81	31.72	51.55
S.D.	4.167	4.308	5.116	5.531	3.837	5.217
N	27	27	27	27	27	27

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		FO ADULT FEMALES GROUP: 0.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7529A01	MALES STILLBORN FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		1																							
		7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7634A02	MALES FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7505A03	MALES FEMALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7513A04	MALES FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7517A05	MALES FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7601A06	MALES STILLBORN FEMALES MISSING STILLBORN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		1																							
		8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7503A07	MALES FEMALES DEAD	1																							
		9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3
7611A08	MALES FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7605A09	MALES DEAD FEMALES STILLBORN	7	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		1																							
		7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3
7593A10	MALES FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		FO ADULT FEMALES GROUP:												0.0 PPM											
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7512A11	MALES	9	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING FEMALES	6	1 6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7638A12	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7628A13	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7639A14	MALES	9	9	9	9	9	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	DEAD	1																							
	STILLBORN	2																							
	FEMALES STILLBORN	2 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7618A15	MALES	11	11	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	STILLBORN	1																							
7555A16	MALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7609A17	MALES	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	STILLBORN	1																							
	FEMALES MISSING	4	4	4	4	3 1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7643A18	MALES	9	9	9	9	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD FEMALES	6	6	6	6	1 6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7635A19	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7629A20	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		F0 ADULT FEMALES GROUP: 0.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7620A21	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7511A22	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7619A23	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7522A24	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7563A25	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7586A26	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7531A27	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7598A28	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
FO ADULT FEMALES GROUP: 300.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7621B01	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7509B02	MALES	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7532B03	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7508B04	MALES	8	8	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD			1																					
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7538B05	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	2																							
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7579B06	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
	FEMALES	8	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD		1																						
	STILLBORN	1																							
7537B07	MALES	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	DEAD	1																							
	FEMALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7574B08	MALES	11	11	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7627B09	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7561B10	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING



TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
FO ADULT FEMALES GROUP: 300.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7608B11	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7564B12	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7630B13	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7518B14	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7585B15	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7600B17	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	10	10	10	10	10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
7603B18	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
7520B19	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7541B20	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
	STILLBORN	1																							
7623B21	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
7631B22	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
FO ADULT FEMALES GROUP: 300.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7578B23	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7527B24	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	2																							
7524B25	MALES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7552B26	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7590B27	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	8	7	7	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	MISSING		1																						
7566B28	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		FO ADULT FEMALES GROUP: 1000.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7550C01	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7588C02	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7556C03	MALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7633C04	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7533C05	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7504C06	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7582C07	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7624C08	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7542C09	MALES	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7543C10	MALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FEMALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7572C11	MALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7573C12	MALES	7	7	7	7	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	STILLBORN FEMALES	1 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
FO ADULT FEMALES GROUP: 1000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7616C13	MALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7540C14	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7617C15	MALES	10	10	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD			1																					
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7565C16	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7516C17	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	11	10	10	10	10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	MISSING		1																						
7625C18	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	7	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	MISSING		1																						
7626C19	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7559C20	MALES	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	STILLBORN	1																							
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7546C21	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7571C22	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	UNDET.																								
	CANNIBALIZED	1																							

B= BEFORE CULLING, A= AFTER CULLING  
UNDET.= UNABLE TO DETERMINE SEX

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		FO ADULT FEMALES GROUP:											1000.0 PPM												
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7606C23	MALES	11	11	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7498C24	MALES	8	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD		1																						
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7615C25	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7612C26	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1	1																						
	MISSING		1																						
	STILLBORN	1																							
7589C27	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7502C28	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
FO ADULT FEMALES GROUP: 2000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7495D01	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7539D02	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7519D03	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7515D04	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7568D05	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7636D06	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7545D07	MALES	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	FEMALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7575D08	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7584D09	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7610D10	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7536D11	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7591D12	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7554D13	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		FO ADULT FEMALES GROUP: 2000.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7557D14	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	9	9	9	9	9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	STILLBORN	1																							
7548D15	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING		1																						
	STILLBORN	1																							
7569D16	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7632D18	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7528D19	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
7547D20	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7549D21	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7583D22	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
7523D23	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7544D24	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING	1																							

B= BEFORE CULLING, A= AFTER CULLING

TABLE 8  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
FO ADULT FEMALES GROUP: 2000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
7637D25	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN FEMALES	1 6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7594D26	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7596D27	MALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7510D28	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 0.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X
			WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT	
7529A01	7.24	6.86	1 M	7.01	2 M	7.38	3 M	7.19	4 M	7.28	5 M	7.34	6 F	6.93	7 F	6.89	8 F	6.73
7634A02	6.15	5.74	9 F	6.95	10 F	6.65	11 F	7.11	12 F	6.76	13 M	s 0						
			1 M	5.64	2 M	6.35	3 M	6.59	4 M	6.22	5 M	5.80	6 M	5.73	7 M	6.34	8 M	6.40
			9 M	6.25	10 F	5.78	11 F	5.95	12 F	6.29	13 F	5.83	14 F	5.78	15 F	6.06	16 F	4.84
7505A03	8.41	8.47	17 F	5.39														
			1 M	8.55	2 M	8.28	3 F	8.51	4 F	7.99	5 F	8.49	6 F	8.90				
7513A04	7.21	6.78	1 M	7.45	2 M	7.07	3 M	7.10	4 M	8.01	5 M	6.91	6 M	7.04	7 M	6.90	8 F	7.15
			9 F	5.06	10 F	6.81	11 F	7.12	12 F	7.09	13 F	7.46						
7517A05	6.20	6.03	1 M	6.79	2 M	6.00	3 M	6.60	4 M	5.55	5 M	6.24	6 M	6.04	7 F	5.82	8 F	6.06
			9 F	6.11	10 F	5.76	11 F	6.71	12 F	6.80	13 F	5.29	14 F	5.99	15 F	5.98	16 F	5.99
7601A06	7.81	7.10	1 M	7.81	2 F	M 1	3 F	M 1	4 F	6.42	5 F	7.16	6 F	7.33	7 F	7.30	8 F	7.22
			9 F	7.20	10 F	s 0	11 M	s 0										
7503A07	6.20	5.77	1 M	6.08	2 M	6.35	3 M	5.66	4 M	5.72	5 M	6.03	6 M	6.13	7 M	6.46	8 M	6.61
			9 M	6.72	10 F	5.65	11 F	6.19	12 F	5.46	13 F	5.89	14 F	5.60	15 F	5.30	16 F	6.32
7611A08	5.80	5.79	1 M	5.34	2 M	5.81	3 M	5.66	4 M	6.40	5 F	5.91	6 F	5.35	7 F	5.79	8 F	5.86
			9 F	5.80	10 F	5.23	11 F	5.43	12 F	6.21	13 F	6.61	14 F	6.15	15 F	5.38		
7605A09	6.71	6.32	1 M	D 1	2 M	6.66	3 M	7.09	4 M	6.84	5 M	6.59	6 M	6.57	7 M	6.51	8 F	6.46
			9 F	6.22	10 F	6.54	11 F	5.84	12 F	6.66	13 F	6.47	14 F	6.03				
7593A10	7.56	6.65	1 M	8.25	2 M	7.44	3 M	7.90	4 M	6.76	5 M	7.44	6 F	6.97	7 F	6.83	8 F	6.74
			9 F	6.40	10 F	6.30												
7512A11	5.98	5.94	1 M	M 1	2 M	6.41	3 M	5.45	4 M	5.53	5 M	6.24	6 M	6.24	7 M	5.59	8 M	6.25
			9 M	6.12	10 F	5.33	11 F	5.84	12 F	5.69	13 F	6.44	14 F	6.02	15 F	6.32		
7638A12	6.73	6.50	1 M	6.67	2 M	6.64	3 M	6.79	4 M	6.57	5 M	6.57	6 M	6.84	7 M	6.87	8 M	6.85
			9 F	6.13	10 F	7.36	11 F	6.13	12 F	6.15	13 F	6.68	14 F	6.80	15 F	6.25		
7628A13	6.73	6.45	1 M	6.62	2 M	6.97	3 M	6.94	4 M	7.12	5 M	6.38	6 M	6.53	7 M	6.88	8 M	6.51
			9 M	6.58	10 F	6.19	11 F	6.56	12 F	6.53	13 F	6.38	14 F	6.61				
7639A14	6.36	6.10	1 M	7.22	2 M	6.55	3 M	6.11	4 M	6.81	5 M	6.29	6 M	6.67	7 M	5.37	8 M	6.39
			9 M	5.85	10 F	6.44	11 F	5.75	12 M	s 0	13 M	s 0	14 M	D 0	15 F	s 0		
7618A15	7.07	6.12	1 M	7.08	2 M	6.45	3 M	7.67	4 M	7.18	5 M	6.69	6 M	7.22	7 M	6.74	8 M	7.45
			9 M	7.30	10 M	7.19	11 M	6.76	12 F	6.34	13 F	6.56	14 F	5.45	15 F	s 0		
7555A16	8.50	7.64	1 M	8.06	2 M	8.94	3 F	7.56	4 F	7.66	5 F	7.71						
			1 M	6.97	2 M	7.11	3 M	7.21	4 M	7.65	5 M	7.61	6 M	7.12	7 M	7.33	8 M	7.04
7609A17	7.25	6.56	9 F	6.99	10 F	5.80	11 F	6.87	12 F	6.60	13 M	s 0						
			1 M	7.62	2 M	7.08	3 M	6.44	4 M	7.15	5 M	7.48	6 M	7.42	7 M	6.40	8 M	6.58
7643A18	7.10	6.95	9 M	7.76	10 F	7.15	11 F	7.01	12 F	7.27	13 F	6.98	14 F	6.79	15 F	6.48		
			1 M	6.36	2 M	5.56	3 M	6.17	4 M	5.65	5 M	6.07	6 M	6.91	7 M	5.85	8 M	6.59
7635A19	6.15	5.76	9 F	6.02	10 F	5.81	11 F	6.16	12 F	4.90	13 F	5.87	14 F	5.33	15 F	6.15	16 F	5.86

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 1		INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 0.0 PPM															
LITTER	MEAN M F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7629A20	6.65 7.07	1 M 6.45	2 M 6.50	3 M 7.21	4 M 6.46	5 F 7.34	6 F 8.08	7 F 7.00	8 F 6.98								
7620A21	7.46 7.22	9 F 6.59	10 F 6.82	11 F 7.07	12 F 6.71												
7511A22	6.78 6.40	1 M 7.16	2 M 7.42	3 M 7.69	4 M 7.99	5 M 7.70	6 M 6.87	7 M 7.36	8 M 7.77								
7619A23	7.32 7.13	9 M 7.22	10 F 7.07	11 F 7.32	12 F 8.08	13 F 7.29	14 F 7.25	15 F 7.14	16 F 6.42								
7522A24	6.51 6.05	1 M 6.74	2 M 6.50	3 M 6.63	4 M 7.11	5 M 6.72	6 M 7.15	7 M 6.87	8 M 6.20								
7563A25	6.82 6.35	9 M 7.14	10 F 7.32	11 F 6.53	12 F 6.84	13 F 4.36	14 F 6.54	15 F 6.83									
7586A26	7.75 7.07	1 M 7.08	2 M 6.71	3 M 6.40	4 M 8.46	5 M 7.41	6 M 7.06	7 M 7.88	8 M 7.56								
7531A27	7.96 7.70	9 F 7.12	10 F 7.25	11 F 6.91	12 F 7.24	13 F 7.12	14 F 7.16										
7598A28	5.54 5.06	1 M 6.67	2 M 6.22	3 M 6.43	4 M 6.37	5 M 6.55	6 M 6.60	7 M 6.61	8 M 6.51								
		9 M 6.63	10 F 6.47	11 F 5.51	12 F 5.68	13 F 6.40	14 F 6.61	15 F 5.62									
		1 M 6.43	2 M 7.43	3 M 6.94	4 M 6.05	5 M 7.17	6 M 6.88	7 F 6.69	8 F 6.11								
		9 F 5.84	10 F 5.87	11 F 6.04	12 F 6.37	13 F 7.09	14 F 6.46	15 F 6.90	16 F 6.14								
		1 M 7.48	2 M 7.87	3 M 7.76	4 M 7.89	5 F 7.00	6 F 7.51	7 F 7.26	8 F 6.96								
		9 F 6.98	10 F 6.71														
		1 M 7.79	2 M 7.08	3 M 8.00	4 M 8.98	5 F 7.62	6 F 8.10	7 F 7.46	8 F 6.80								
		9 F 8.51															
		1 M 5.69	2 M 6.24	3 M 5.05	4 M 5.12	5 M 5.59	6 F 4.83	7 F 5.35	8 F 5.14								
		9 F 4.98	10 F 5.47	11 F 4.54	12 F 5.00	13 F 5.18	14 F 5.0										
MEAN	6.93 6.56																
S.D.	0.76 0.73																
N	28 28																

s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 1		INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 300.0 PPM																	
LITTER	MEAN M F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7621B01	6.80 6.07	1 M 7.19 9 F 5.76	2 M 6.85 10 F 5.72	3 M 6.56 11 F 5.98	4 M 6.65 12 F 6.73	5 M 6.88 6 M 6.40	7 M 7.08 8 F 6.14												
7509B02	8.03 7.63	1 M 7.78 9 F 7.43	2 M 8.36 10 F 5.57	3 M 8.17 11 F 5.88	4 M 8.15 12 F 6.48	5 M 7.82 6 M 6.01	7 F 5.72 8 F 5.61												
7532B03	6.14 5.82	1 M 5.81 9 F 5.51	2 M 5.57 10 F 5.88	3 M 6.26 11 F 5.70	4 M 6.54 12 F 6.48	5 M 6.62 6 M 6.01	7 F 5.72 8 F 5.61												
7508B04	6.52 6.21	1 M 6.02 9 F 6.23	2 M 6.99 10 F 6.69	3 M 6.98 11 F 5.88	4 M 6.26 12 F 5.93	5 M 6.01 13 F 6.44	6 M 6.68 14 F 6.10	7 M 6.32 8 M 6.86											
7538B05	7.10 6.84	1 M 7.43 9 F 7.02	2 M 7.24 10 F 7.01	3 M 6.83 11 F 6.76	4 M 7.07 12 F 6.56	5 M 6.69 13 M s 0	6 M 7.58 14 M s 0	7 M 7.15 8 M 6.81											
7579B06	6.02 6.23	1 M 6.08 9 F 6.02	2 M 6.04 10 F 6.26	3 M 6.44 11 F 6.43	4 M 6.04 12 F 6.56	5 M 6.26 13 F 6.35	6 M 5.89 14 F 5.60	7 M 5.40 15 F 6.40	8 F D 1 16 M s 0										
7537B07	8.08 7.30	1 M 8.43 9 F 6.56	2 M 7.87 10 M D 0	3 M 8.26 4 M 7.92	5 M 8.16 6 M 8.11	7 M 7.78 8 F 8.04													
7574B08	7.23 6.79	1 M 7.43 9 M 6.65	2 M 7.30 10 M 7.62	3 M 7.29 11 M 6.89	4 M 7.96 12 F 7.03	5 M 6.70 13 F 6.85	6 M 7.46 14 F 6.49	7 M 6.86 8 M 7.37											
7627B09	7.59 6.38	1 M 7.14 9 F 7.70	2 M 7.62 10 F 6.14	3 M 7.47 11 F 6.80	4 M 7.70 12 F 4.88	5 M 7.82 13 M s 0	6 M 8.36 7 M 7.41	8 M 7.17											
7561B10	7.27 6.70	1 M 7.35 9 F 6.45	2 M 7.73 10 F 6.76	3 M 7.27 11 F 6.75	4 M 6.74 12 F 7.25	5 F 6.44 6 F 6.96	7 F 6.74 8 F 6.27												
7608B11	6.43 6.03	1 M 6.76 9 F 5.80	2 M 6.31 10 F 5.93	3 M 6.89 11 F 6.05	4 M 5.88 12 F 6.41	5 M 6.24 13 F 6.23	6 M 6.48 14 F 6.09	7 F 6.13 15 F 5.50	8 F 6.11										
7564B12	7.12 7.12	1 M 7.34 9 F 6.84	2 M 6.40 10 F 7.50	3 M 7.52 11 F 7.50	4 M 7.30 12 F 7.28	5 M 7.06 6 F 6.32	7 F 7.45 8 F 6.93												
7630B13	6.53 6.23	1 M 6.41 9 F 6.13	2 M 6.21 10 F 6.46	3 M 6.75 11 F 5.84	4 M 6.31 12 F 6.32	5 M 6.57 13 F 6.82	6 M 6.87 14 F 5.73	7 M 6.62 15 F 6.40	8 F 6.11										
7518B14	7.09 6.55	1 M 6.81 9 F 6.57	2 M 7.55 10 F 6.67	3 M 7.14 11 F 6.29	4 M 7.12 12 F 6.86	5 M 7.00 6 M 6.95	7 F 6.26 8 F 6.63												
7585B15	6.65 6.24	1 M 7.41 9 F 6.35	2 M 6.54 10 F 6.15	3 M 6.31 11 F 4.63	4 M 6.45 12 F 6.37	5 M 6.53 13 F 6.67	6 F 6.07 14 F 6.58	7 F 6.27 8 F 7.03											
7600B17	7.34 7.03	1 M 7.17 9 F 6.64	2 M 7.37 10 F 7.40	3 M 7.48 11 F 7.50	4 F 7.41 12 F 6.82	5 F 7.61 13 F 6.89	6 F 7.02 7 F 7.37	8 F 5.66											
7603B18	6.93 6.92	1 M 7.06 9 F 6.80	2 M 6.90 10 F 7.11	3 M 7.43 11 F 6.66	4 M 6.56 12 F 7.10	5 M 7.22 13 F s 0	6 M 6.84 7 M 6.70	8 M 6.75											
7520B19	7.35 6.72	1 M 7.78 9 F 7.17	2 M 7.28 10 F 4.62	3 M 6.94 11 F 6.92	4 M 6.86 12 F 7.14	5 M 7.90 13 F 6.85	6 F 7.05 14 M s 0	7 F 6.80 8 F 7.17											

D= DEAD, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 300.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X
7541B20	6.79	6.53	1 M	6.41	2 M	6.91	3 M	6.84	4 M	6.25	5 M	7.73	6 M	6.76	7 M	6.28	8 M	7.11
			9 F	D 0	10 F	6.59	11 F	5.86	12 F	6.60	13 F	6.95	14 F	6.66	15 M	s 0	16 F	s 0
7623B21	6.72	6.59	1 M	6.40	2 M	6.72	3 M	7.03	4 F	6.72	5 F	6.85	6 F	6.40	7 F	6.50	8 F	6.48
7631B22	6.68	6.41	1 M	7.27	2 M	6.87	3 M	6.35	4 M	6.45	5 M	6.91	6 M	6.22	7 F	6.77	8 F	6.28
			9 F	6.14	10 F	6.46	11 F	6.39	12 F	6.68	13 F	6.43	14 F	6.16				
7578B23	6.91	6.78	1 M	6.57	2 M	7.40	3 M	7.31	4 M	5.85	5 M	7.17	6 M	6.81	7 M	7.02	8 M	7.16
			9 F	6.35	10 F	6.30	11 F	6.53	12 F	6.36	13 F	7.00	14 F	7.43	15 F	7.20	16 F	7.05
7527B24#	7.54	7.19	1 M	7.92	2 M	7.49	3 M	7.41	4 M	7.75	5 M	7.45	6 M	7.21	7 F	6.74	8 F	7.40
			9 F	7.07	10 F	7.29	11 F	7.44	12 M	s 0	13 F	s 0	14 F	s 0				
7524B25	9.02	8.43	1 M	9.02	2 F	8.78	3 F	8.70	4 F	7.67	5 F	8.56						
7552B26	7.54	7.03	1 M	7.77	2 M	7.62	3 M	7.20	4 M	7.47	5 M	7.80	6 M	7.36	7 F	6.99	8 F	7.19
			9 F	7.12	10 F	6.98	11 F	7.06	12 F	6.90	13 F	7.32	14 F	6.66				
7590B27	7.30	6.39	1 M	7.29	2 M	7.58	3 M	7.04	4 F	M 1	5 F	6.93	6 F	6.41	7 F	6.73	8 F	6.10
			9 F	5.75	10 F	5.76	11 F	7.07										
7566B28	6.73	6.59	1 M	6.65	2 M	7.36	3 M	7.24	4 M	5.84	5 M	7.13	6 M	6.71	7 M	5.88	8 M	6.83
			9 M	6.97	10 F	6.12	11 F	7.24	12 F	7.13	13 F	6.42	14 F	6.06	15 M	s 0		
MEAN	7.09	6.69																
S.D.	0.63	0.55																
N	27	27																

D= DEAD, M= MISSING, s= STILLBORN  
#= AT LEAST ONE PUP IN LITTER MISSEXED

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P U E	P X	W E I G H T	P U E	P X	W E I G H T	P U E	P X	W E I G H T	P U E	P X	W E I G H T	P U E	P X	W E I G H T	P U E	P X	W E I G H T
	M	F																		
7550C01	8.53	7.64	1 M	8.73	2 M	8.44	3 M	8.38	4 M	8.57	5 F	7.25	6 F	7.64	7 F	7.76	8 F	7.91		
7588C02	6.66	6.11	1 M	6.82	2 M	6.54	3 M	6.45	4 M	6.80	5 M	6.74	6 M	6.77	7 M	6.46	8 M	6.83		
			9 M	6.55	10 F	6.13	11 F	6.12	12 F	5.98	13 F	6.21	14 F	6.11						
7556C03	6.30	6.16	1 M	6.96	2 M	6.63	3 M	6.33	4 M	5.78	5 M	5.70	6 M	6.93	7 M	6.07	8 M	6.82		
			9 M	6.25	10 M	5.50	11 F	5.94	12 F	5.90	13 F	5.84	14 F	6.29	15 F	6.85				
7633C04	5.66	5.69	1 M	5.70	2 M	5.70	3 M	6.03	4 M	4.30	5 M	5.75	6 M	5.88	7 M	6.29	8 F	5.40		
			9 F	5.65	10 F	5.69	11 F	5.34	12 F	6.19	13 F	5.85								
7533C05	6.97	6.54	1 M	7.00	2 M	7.17	3 M	6.78	4 M	7.09	5 M	6.80	6 M	7.22	7 M	6.75	8 F	6.66		
			9 F	6.99	10 F	6.79	11 F	6.70	12 F	6.32	13 F	5.78								
7504C06	7.21	6.67	1 M	7.21	2 M	7.63	3 M	7.62	4 M	7.07	5 M	6.52	6 F	6.80	7 F	6.25	8 F	6.25		
			9 F	6.18	10 F	7.02	11 F	6.82	12 F	6.56	13 F	6.98	14 F	6.66	15 F	7.14				
7582C07	7.07	6.81	1 M	7.26	2 M	6.76	3 M	7.04	4 M	7.20	5 F	7.38	6 F	6.47	7 F	6.20	8 F	6.83		
			9 F	6.93	10 F	6.78	11 F	6.97	12 F	7.18	13 F	6.56								
7624C08	6.65	6.66	1 M	7.08	2 M	7.14	3 M	5.94	4 M	6.32	5 M	6.44	6 M	6.98	7 F	7.12	8 F	6.66		
			9 F	6.15	10 F	6.76	11 F	6.63	12 F	6.12	13 F	6.91	14 F	6.91						
7542C09	7.55	7.46	1 M	7.20	2 M	7.76	3 M	8.17	4 M	7.76	5 M	7.17	6 M	7.48	7 M	7.43	8 M	7.41		
			9 F	7.71	10 F	7.10	11 F	7.58												
7543C10	7.83	8.88	1 M	7.88	2 M	7.78	3 F	8.17	4 F	9.59										
7572C11	7.26	6.94	1 M	7.27	2 M	6.87	3 M	7.41	4 M	7.58	5 M	7.68	6 M	6.74	7 M	6.94	8 M	7.38		
			9 M	7.26	10 M	7.49	11 F	6.91	12 F	7.29	13 F	7.05	14 F	6.69	15 F	6.77				
7573C12	8.49	7.45	1 M	8.33	2 M	8.76	3 M	8.29	4 M	8.62	5 M	8.03	6 M	8.61	7 M	8.82	8 F	7.83		
			9 F	7.83	10 F	6.69	11 M	s 0												
7616C13	6.37	6.04	1 M	6.63	2 M	6.91	3 M	6.38	4 M	6.61	5 M	6.32	6 M	6.62	7 M	6.22	8 M	6.66		
			9 M	5.82	10 M	5.81	11 M	6.05	12 F	6.02	13 F	6.15	14 F	6.11	15 F	5.80	16 F	5.71		
			17 F	6.30	18 F	6.20														
7540C14	7.03	6.78	1 M	6.53	2 M	7.32	3 M	7.40	4 M	6.56	5 M	7.60	6 M	6.82	7 M	6.99	8 F	6.55		
			9 F	6.52	10 F	7.80	11 F	7.32	12 F	6.90	13 F	6.13	14 F	6.22						
7617C15	6.18	6.23	1 M	6.78	2 M	6.07	3 M	6.61	4 M	5.62	5 M	6.21	6 M	6.67	7 M	5.92	8 M	5.41		
			9 M	6.89	10 M	5.66	11 F	5.85	12 F	6.19	13 F	5.25	14 F	6.40	15 F	6.95	16 F	6.69		
			17 F	6.27																
7565C16	6.94	6.60	1 M	7.31	2 M	6.41	3 M	7.17	4 M	6.93	5 M	6.89	6 F	6.73	7 F	7.14	8 F	6.39		
			9 F	6.65	10 F	6.38	11 F	6.95	12 F	5.94	13 F	6.63								
7516C17	6.94	6.60	1 M	7.13	2 M	7.25	3 M	6.44	4 F	M 1	5 F	6.69	6 F	6.09	7 F	6.43	8 F	7.17		
			9 F	6.39	10 F	7.73	11 F	6.59	12 F	5.78	13 F	6.41	14 F	6.70						
7625C18	8.15	7.84	1 M	9.15	2 M	7.49	3 M	7.80	4 F	M 1	5 F	8.67	6 F	6.79	7 F	7.75	8 F	6.77		
			9 F	8.95	10 F	8.12														
7626C19	6.89	6.68	1 M	6.64	2 M	7.19	3 M	6.90	4 M	7.18	5 M	7.20	6 M	6.22	7 F	6.81	8 F	6.29		
			9 F	6.49	10 F	7.44	11 F	6.84	12 F	6.58	13 F	6.88	14 F	6.49	15 F	6.28	16 F	6.71		

M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7559C20	7.37	7.08	1 M	7.85	2 M	7.15	3 M	6.71	4 M	7.40	5 M	7.73	6 F	7.04	7 F	6.85	8 F	7.36
			9 M	s 0														
7546C21	7.01	6.29	1 M	7.40	2 M	7.56	3 M	6.48	4 M	6.63	5 M	7.00	6 F	5.75	7 F	6.04	8 F	6.16
			9 F	6.81	10 F	6.12	11 F	6.49	12 F	6.12	13 F	6.56	14 F	6.53				
7571C22	7.00	6.69	1 M	6.90	2 M	7.44	3 M	7.03	4 M	7.16	5 M	6.49	6 F	6.45	7 F	7.58	8 F	6.71
			9 F	6.48	10 F	6.21	11 M	D 0	12 U	C 0								
7606C23	7.01	6.81	1 M	7.28	2 M	7.21	3 M	6.61	4 M	6.95	5 M	6.81	6 M	6.94	7 M	6.88	8 M	7.10
			9 M	7.08	10 M	7.47	11 M	6.73	12 F	6.92	13 F	7.19	14 F	6.33				
7498C24	6.37	6.45	1 M	D 1	2 M	7.00	3 M	5.67	4 M	6.75	5 M	6.43	6 M	5.26	7 M	7.36	8 M	6.12
			9 F	5.70	10 F	7.33	11 F	7.31	12 F	6.25	13 F	5.83	14 F	6.85	15 F	6.93	16 F	5.82
			17 F	6.01														
7615C25	8.76	8.26	1 M	9.14	2 M	8.64	3 M	8.62	4 M	8.63	5 F	8.42	6 F	8.66	7 F	7.93	8 F	8.31
			9 F	7.96														
7612C26	5.44	5.14	1 M	5.79	2 M	5.12	3 M	5.88	4 M	5.35	5 M	4.58	6 M	5.33	7 M	5.88	8 M	5.59
			9 F	M 1	10 F	D 1	11 F	5.06	12 F	5.17	13 F	5.49	14 F	4.77	15 F	5.14	16 F	4.92
			17 F	5.40	18 F	D 0	19 F	s 0										
7589C27	5.38	5.08	1 M	5.91	2 M	5.27	3 M	4.66	4 M	5.79	5 M	5.23	6 M	5.66	7 M	5.15	8 F	5.27
			9 F	5.48	10 F	4.90	11 F	3.91	12 F	5.78	13 F	4.47	14 F	5.37	15 F	5.58	16 F	4.97
7502C28	6.89	6.73	1 M	6.66	2 M	6.60	3 M	7.29	4 M	6.50	5 M	6.69	6 M	7.16	7 M	7.33	8 F	6.93
			9 F	6.54	10 F	6.48	11 F	7.16	12 F	6.45	13 F	6.52	14 F	6.81	15 F	6.82	16 F	6.82
MEAN	7.00	6.72																
S.D.	0.85	0.83																
N	28	28																

D= DEAD, C= CANNIBALIZED, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7495D01	6.26	5.79	1 M	6.51	2 M	6.41	3 M	6.34	4 M	6.06	5 M	5.67	6 M	6.67	7 M	6.24	8 M	6.40
7539D02	7.59	7.14	9 M	6.08	10 F	6.35	11 F	6.12	12 F	4.65	13 F	5.32	14 F	5.99	15 F	6.34		
			1 M	7.80	2 M	7.48	3 M	8.05	4 M	7.95	5 M	7.85	6 M	6.66	7 M	7.31	8 F	7.48
7519D03	6.70	6.26	9 F	7.09	10 F	7.00	11 F	6.99										
			1 M	7.23	2 M	6.36	3 M	6.43	4 M	6.64	5 M	6.49	6 M	7.03	7 F	5.96	8 F	6.24
7515D04	6.44	5.82	9 F	6.25	10 F	6.34	11 F	6.56	12 F	6.24								
			1 M	6.93	2 M	6.46	3 M	6.30	4 M	6.64	5 M	5.88	6 F	6.36	7 F	5.62	8 F	6.10
7568D05	6.61	6.29	9 F	5.65	10 F	5.37	11 F	5.72	12 F	5.46	13 F	6.09	14 F	5.98				
			1 M	6.67	2 M	5.40	3 M	6.98	4 M	6.60	5 M	7.34	6 M	6.38	7 M	6.35	8 M	7.13
7636D06	7.54	7.48	9 F	5.96	10 F	6.25	11 F	6.23	12 F	6.72								
			1 M	7.53	2 M	7.55	3 M	7.68	4 M	7.47	5 M	7.48	6 F	7.24	7 F	6.99	8 F	7.35
7545D07	8.12	7.18	9 F	7.50	10 F	7.66	11 F	7.61	12 F	8.01								
			1 M	8.81	2 M	8.55	3 M	8.41	4 M	7.84	5 M	8.16	6 M	6.94	7 F	7.47	8 F	6.89
7575D08	6.24	5.92	1 M	6.37	2 M	5.80	3 M	6.47	4 M	6.53	5 M	6.32	6 M	6.16	7 M	6.03	8 F	5.76
			9 F	5.69	10 F	5.18	11 F	6.12	12 F	6.03	13 F	6.10	14 F	5.95	15 F	6.52		
7584D09	6.18	6.01	1 M	6.40	2 M	6.57	3 M	6.06	4 M	5.50	5 M	6.24	6 M	6.45	7 M	5.73	8 M	6.50
			9 F	5.97	10 F	5.44	11 F	6.07	12 F	6.09	13 F	6.47	14 F	6.19	15 F	6.18	16 F	6.04
7610D10	6.68	6.46	17 F	5.61														
			1 M	6.75	2 M	6.91	3 M	6.35	4 M	6.60	5 M	6.84	6 M	6.65	7 F	7.29	8 F	6.31
7536D11	7.15	6.73	9 F	5.79	10 F	6.60	11 F	6.54	12 F	6.66	13 F	6.03						
			1 M	7.04	2 M	7.36	3 M	7.31	4 M	7.28	5 M	7.00	6 M	7.01	7 M	7.05	8 F	6.98
7591D12	7.47	6.77	9 F	7.05	10 F	6.63	11 F	6.26										
			1 M	7.46	2 M	7.51	3 M	7.43	4 F	7.33	5 F	6.84	6 F	6.15				
7554D13	7.33	6.99	1 M	7.60	2 M	7.29	3 M	7.05	4 M	7.84	5 M	7.32	6 M	6.88	7 F	8.22	8 F	6.78
			9 F	5.92	10 F	6.70	11 F	7.15	12 F	7.21	13 F	6.95						
7557D14	6.94	6.74	1 M	6.97	2 M	7.11	3 M	6.75	4 F	6.85	5 F	6.22	6 F	6.50	7 F	7.70	8 F	6.43
			9 F	6.87	10 F	6.56	11 F	6.80	12 F	6.70	13 F	s 0						
7548D15	7.08	6.77	1 M	7.68	2 M	7.15	3 M	7.10	4 M	6.81	5 M	6.86	6 M	7.17	7 M	6.76	8 F	M 1
			9 F	7.03	10 F	6.79	11 F	6.82	12 F	6.43	13 F	s 0						
7569D16	6.93	6.54	1 M	7.52	2 M	6.54	3 M	7.20	4 M	6.83	5 M	6.86	6 M	6.65	7 F	6.51	8 F	7.52
			9 F	6.31	10 F	6.11	11 F	6.62	12 F	6.07	13 F	7.01	14 F	5.80	15 F	6.92		
7632D18	6.93	6.86	1 M	7.03	2 M	6.67	3 M	7.22	4 M	6.99	5 M	6.56	6 M	7.25	7 M	6.53	8 M	7.19
			9 F	6.90	10 F	6.89	11 F	7.26	12 F	6.41	13 F	6.85						
7528D19	7.65	7.35	1 M	8.52	2 M	7.64	3 M	7.24	4 M	7.73	5 M	7.72	6 M	6.95	7 M	7.78	8 F	7.91
			9 F	7.14	10 F	7.01	11 F	7.02	12 F	7.38	13 F	7.03	14 F	7.96	15 F	D 0		
7547D20	7.87	7.36	1 M	7.62	2 M	7.78	3 M	8.05	4 M	7.59	5 M	8.31	6 F	7.01	7 F	7.56	8 F	7.22
			9 F	7.67	10 F	7.36												

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7549D21	6.99	6.58	1 M	7.49	2 M	6.45	3 M	6.70	4 M	6.86	5 M	6.83	6 M	7.12	7 M	7.50	8 M	6.97
7583D22	7.58	7.37	9 F	6.65	10 F	6.68	11 F	6.83	12 F	6.64	13 F	6.53	14 F	5.87	15 F	6.87	8 F	D 0
			1 M	7.54	2 M	7.41	3 M	8.34	4 M	7.23	5 M	7.51	6 M	7.46	7 F	7.17		
7523D23	7.38	7.09	9 F	7.34	10 F	7.31	11 F	7.45	12 F	7.57	5 M	7.80	6 M	7.45	7 M	7.77	8 F	6.98
			1 M	6.92	2 M	7.31	3 M	7.47	4 M	6.95								
7544D24	6.53	6.30	9 F	6.81	10 F	7.30	11 F	7.39	12 F	6.99	13 F	7.09	6 M	6.36	7 M	6.07	8 M	7.22
			1 M	6.93	2 M	6.01	3 M	6.31	4 M	6.69	5 M	6.61						
7637D25	6.84	6.70	9 F	M 0	10 F	6.15	11 F	6.38	12 F	6.68	13 F	6.57	14 F	5.74	7 F	6.81	8 F	6.67
			1 M	7.13	2 M	6.48	3 M	7.08	4 M	6.89	5 M	6.67	6 M	6.78				
7594D26	6.06	5.80	9 F	6.89	10 F	6.64	11 F	6.22	12 F	6.99	13 M	s 0	6 M	3.46	7 M	5.66	8 M	6.19
			1 M	6.17	2 M	6.43	3 M	6.05	4 M	6.16	5 M	5.28						
7596D27	7.19	6.84	9 M	6.14	10 F	5.89	11 F	6.02	12 F	5.79	13 F	5.49	6 M	7.33	7 M	7.32	8 M	7.55
			1 M	7.14	2 M	6.19	3 M	6.80	4 M	7.40	5 M	7.53						
7510D28	6.77	6.38	9 M	6.98	10 M	7.70	11 F	6.80	12 F	6.93	13 F	7.29	14 F	6.34	7 F	6.20	8 F	5.84
			1 M	6.66	2 M	6.92	3 M	6.76	4 M	7.16	5 M	6.77	6 M	6.37				
			9 F	6.25	10 F	6.66	11 F	6.60	12 F	6.69	13 F	6.41	14 F	6.38				
MEAN	7.00	6.65																
S.D.	0.54	0.51																
N	27	27																

D= DEAD, M= MISSING, s= STILLBORN



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 0.0 PPM															
LITTER	MEAN		P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S
	M	F	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E
			P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X
			WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
7529A01	10.51	10.01	1 M 10.31	2 M 10.42	3 M 10.69	4 M 10.59	5 M 10.55	6 F 10.04	7 F 9.92	8 F 10.35								
7634A02	8.04	7.57	9 F 9.83	10 F 10.12	11 F 9.89	12 F 9.89	13 M s 0											
			1 M 8.03	2 M 7.74	3 M 8.18	4 M 7.53	5 M 8.33	6 M 8.24	7 M 8.65	8 M 8.25								
			9 M 7.45	10 F 7.79	11 F 7.45	12 F 7.68	13 F 7.10	14 F 7.66	15 F 8.29	16 F 7.56								
			17 F 7.03															
7505A03	12.20	12.57	1 M 11.70	2 M 12.71	3 F 12.95	4 F 12.01	5 F 13.02	6 F 12.28										
7513A04	9.81	9.35	1 M 9.30	2 M 10.24	3 M 9.45	4 M 9.84	5 M 10.44	6 M 9.54	7 M 9.83	8 F 9.10								
7517A05	9.77	9.82	9 F 7.21	10 F 10.51	11 F 9.54	12 F 10.02	13 F 9.70											
			1 M 8.60	2 M 9.70	3 M 9.70	4 M 10.40	5 M 9.90	6 M 10.30	7 F 10.80	8 F 8.50								
			9 F 9.80	10 F 8.80	11 F 10.20	12 F 9.50	13 F 10.20	14 F 9.50	15 F 10.80	16 F 10.10								
7601A06	12.16	11.40	1 M 12.16	2 F M 1	3 F M 1	4 F 11.34	5 F 11.02	6 F 11.27	7 F 12.14	8 F 10.97								
7503A07	9.05	8.48	9 F 11.67	10 F s 0	11 M s 0													
			1 M 9.57	2 M 9.09	3 M 8.81	4 M 8.75	5 M 8.68	6 M 8.56	7 M 9.71	8 M 8.98								
			9 M 9.30	10 F 9.42	11 F 8.68	12 F 8.21	13 F 8.47	14 F 8.80	15 F 7.71	16 F 8.08								
7611A08	7.33	7.95	1 M 8.56	2 M 7.96	3 M 5.85	4 M 6.94	5 F 8.06	6 F 7.61	7 F 8.92	8 F 8.90								
7605A09	9.45	9.05	9 F 7.89	10 F 6.80	11 F 7.33	12 F 6.96	13 F 8.71	14 F 9.14	15 F 7.09									
			1 M D 1	2 M 9.58	3 M 9.26	4 M 9.13	5 M 9.16	6 M 10.21	7 M 9.35	8 F 8.52								
			9 F 8.42	10 F 9.82	11 F 8.57	12 F 9.19	13 F 9.22	14 F 9.59										
7593A10	10.59	9.83	1 M 10.96	2 M 10.77	3 M 10.24	4 M 10.96	5 M 10.01	6 F 9.92	7 F 10.34	8 F 9.33								
7512A11	9.03	9.22	9 F 9.85	10 F 9.73														
			1 M M 1	2 M 8.76	3 M 8.09	4 M 9.01	5 M 9.94	6 M 8.99	7 M 9.37	8 M 9.46								
			9 M 8.62	10 F 9.74	11 F 9.86	12 F 9.19	13 F 9.10	14 F 8.92	15 F 8.51									
7638A12	9.83	9.72	1 M 10.45	2 M 9.73	3 M 8.88	4 M 10.07	5 M 9.64	6 M 10.23	7 M 9.68	8 M 9.99								
7628A13	10.50	9.98	9 F 9.15	10 F 10.72	11 F 9.46	12 F 11.11	13 F 8.76	14 F 9.57	15 F 9.28									
			1 M 10.22	2 M 10.36	3 M 10.37	4 M 11.00	5 M 10.34	6 M 10.06	7 M 10.31	8 M 10.76								
			9 M 11.12	10 F 9.71	11 F 10.17	12 F 10.02	13 F 10.05	14 F 9.94										
7639A14	9.75	9.43	1 M 9.95	2 M 9.54	3 M 10.36	4 M 8.49	5 M 10.11	6 M 10.87	7 M 10.83	8 M 8.95								
7618A15	9.62	8.71	9 M 8.68	10 F 9.86	11 F 9.01	12 M s 0	13 M s 0	14 M D 0	15 F s 0									
			1 M 8.65	2 M 9.91	3 M 9.09	4 M 9.74	5 M 9.91	6 M 10.12	7 M 10.20	8 M 9.58								
			9 M 9.82	10 M 8.72	11 M 10.07	12 F 9.16	13 F 8.83	14 F 8.13	15 F s 0									
7555A16	12.89	12.09	1 M 13.28	2 M 12.50	3 F 12.37	4 F 11.61	5 F 12.28											
7609A17	10.82	9.96	1 M 10.31	2 M 10.72	3 M 10.60	4 M 11.32	5 M 10.37	6 M 11.25	7 M 11.35	8 M 10.60								
7643A18	10.45	9.85	9 F M 4	10 F 10.03	11 F 9.88	12 F 9.96	13 M s 0											
			1 M D 4	2 M 11.78	3 M 10.52	4 M 9.21	5 M 10.81	6 M 10.69	7 M 11.43	8 M 9.41								
			9 M 9.77	10 F 10.65	11 F 10.15	12 F 10.23	13 F 10.95	14 F 8.17	15 F 8.95									
7635A19	9.07	8.81	1 M 8.91	2 M 8.94	3 M 10.15	4 M 8.47	5 M 9.12	6 M 9.69	7 M 8.45	8 M 8.83								
			9 F 9.67	10 F 9.05	11 F 9.23	12 F 8.76	13 F 8.77	14 F 7.53	15 F 8.54	16 F 8.92								

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 0.0 PPM															
			P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	
LITTER	MEAN M	F																
7629A20	10.39	10.65	1 M 10.10	2 M 11.25	3 M 10.42	4 M 9.77	5 F 10.29	6 F 11.99	7 F 10.56	8 F 10.08								
7620A21	10.85	10.19	9 F 10.71	10 F 10.63	11 F 9.88	12 F 11.02												
			1 M 10.83	2 M 11.30	3 M 10.12	4 M 10.39	5 M 11.43	6 M 10.63	7 M 10.91	8 M 10.20								
7511A22	9.64	8.98	9 M 11.86	10 F 10.92	11 F 10.80	12 F 9.77	13 F 9.67	14 F 10.02	15 F 11.10	16 F 9.08								
			1 M 10.63	2 M 9.00	3 M 8.50	4 M 9.98	5 M 9.34	6 M 9.79	7 M 9.72	8 M 10.31								
7619A23	10.42	10.42	9 M 9.48	10 F 4.63	11 F 9.52	12 F 9.86	13 F 10.47	14 F 9.40	15 F 10.03									
			1 M 10.47	2 M 9.68	3 M 10.50	4 M 9.12	5 M 9.77	6 M 11.61	7 M 11.15	8 M 11.08								
7522A24	9.29	8.93	9 F 10.09	10 F 9.99	11 F 10.41	12 F 10.72	13 F 10.66	14 F 10.67										
			1 M 9.47	2 M 9.60	3 M 9.42	4 M 8.64	5 M 8.85	6 M 8.73	7 M 10.14	8 M 9.44								
7563A25	9.24	8.79	9 M 9.35	10 F 8.17	11 F 9.98	12 F 8.18	13 F 8.93	14 F 9.95	15 F 8.39									
			1 M 9.78	2 M 8.92	3 M 10.03	4 M 9.94	5 M 8.60	6 M 8.20	7 F 10.04	8 F 9.44								
7586A26	11.35	10.56	9 F 9.49	10 F 7.97	11 F 7.91	12 F 9.41	13 F 8.99	14 F 8.41	15 F 8.34	16 F 7.89								
			1 M 10.63	2 M 11.23	3 M 11.90	4 M 11.65	5 F 10.97	6 F 10.79	7 F 10.76	8 F 10.29								
7531A27	12.00	11.76	9 F 10.11	10 F 10.45														
			1 M 10.68	2 M 12.94	3 M 12.58	4 M 11.79	5 F 12.55	6 F 11.21	7 F 11.87	8 F 10.65								
7598A28	8.53	7.87	9 F 12.54															
			1 M 8.57	2 M 9.20	3 M 8.16	4 M 7.88	5 M 8.86	6 F 7.35	7 F 7.29	8 F 8.15								
			9 F 7.78	10 F 8.23	11 F 8.42	12 F 7.89	13 F 7.89	14 F s 0										
MEAN	10.09	9.71																
S.D.	1.28	1.23																
N	28	28																

s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 300.0 PPM															
LITTER	MEAN		P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S
	M	F	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E
			P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X
			WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
7621B01	10.32	9.32	1 M 10.13	2 M 10.42	3 M 10.08	4 M 10.48	5 M 10.47	6 M 10.42	7 M 10.22	8 F 9.86								
			9 F 8.75	10 F 9.59	11 F 8.41	12 F 9.98												
7509B02	12.02	11.53	1 M 11.63	2 M 11.81	3 M 12.51	4 M 12.37	5 M 11.64	6 M 12.15	7 F 10.96	8 F 11.51								
			9 F 12.11															
7532B03	9.65	9.18	1 M 8.48	2 M 9.50	3 M 10.07	4 M 10.76	5 M 10.22	6 M 8.89	7 F 8.23	8 F 8.72								
			9 F 9.52	10 F 10.50	11 F 8.93	12 F 9.18												
7508B04	9.55	8.72	1 M D 2	2 M 8.37	3 M 9.72	4 M 9.03	5 M 9.10	6 M 9.49	7 M 9.24	8 M 11.91								
			9 F 7.63	10 F 9.27	11 F 9.72	12 F 9.31	13 F 7.95	14 F 8.41										
7538B05	10.10	9.99	1 M 9.92	2 M 10.14	3 M 9.59	4 M 10.36	5 M 10.11	6 M 10.52	7 M 9.95	8 M 10.21								
			9 F 10.00	10 F 10.06	11 F 9.61	12 F 10.27	13 M s 0	14 M s 0										
7579B06	9.57	9.41	1 M 9.90	2 M 8.70	3 M 10.50	4 M 9.20	5 M 9.80	6 M 9.50	7 M 9.40	8 F D 1								
			9 F 9.30	10 F 9.60	11 F 10.20	12 F 8.70	13 F 9.00	14 F 9.50	15 F 9.60	16 M s 0								
			17 F s 0															
7537B07	12.22	11.28	1 M 11.90	2 M 12.36	3 M 11.93	4 M 11.49	5 M 12.41	6 M 12.78	7 M 12.70	8 F 10.34								
			9 F 12.21	10 M D 0														
7574B08	10.22	9.31	1 M 10.70	2 M 11.78	3 M 9.25	4 M 10.34	5 M 10.28	6 M 9.60	7 M 9.62	8 M 10.08								
			9 M 10.44	10 M 10.35	11 M 9.96	12 F 9.05	13 F 9.39	14 F 9.48										
7627B09	11.11	9.65	1 M 11.87	2 M 10.24	3 M 11.80	4 M 11.51	5 M 11.09	6 M 10.37	7 M 10.81	8 M 11.19								
			9 F 10.83	10 F 10.45	11 F 10.10	12 F 7.24	13 M s 0											
7561B10	10.75	10.20	1 M 10.97	2 M 11.00	3 M 10.38	4 M 10.64	5 F 10.26	6 F 10.88	7 F 10.03	8 F 10.52								
			9 F 9.80	10 F 10.68	11 F 10.10	12 F 9.33												
7608B11	9.37	9.12	1 M 9.32	2 M 9.71	3 M 9.68	4 M 9.46	5 M 9.19	6 M 8.84	7 F 9.67	8 F 9.65								
			9 F 7.61	10 F 8.97	11 F 9.67	12 F 9.06	13 F 9.01	14 F 9.39	15 F 9.03									
7564B12	10.63	10.32	1 M 9.57	2 M 10.92	3 M 11.14	4 M 10.66	5 M 10.84	6 F 10.75	7 F 10.07	8 F 10.85								
			9 F 10.97	10 F 9.70	11 F 9.50	12 F 10.39												
7630B13	8.73	9.01	1 M 9.30	2 M 9.28	3 M 8.72	4 M 9.20	5 M 7.27	6 M 8.39	7 M 8.92	8 F 8.60								
			9 F 9.88	10 F 8.36	11 F 8.74	12 F 8.98	13 F 9.10	14 F 9.45	15 F 8.98									
7518B14	10.25	9.46	1 M 10.30	2 M 10.19	3 M 10.18	4 M 9.98	5 M 10.59	6 M 10.24	7 F 8.81	8 F 9.04								
			9 F 9.64	10 F 9.62	11 F 9.61	12 F 10.02												
7585B15	9.58	8.92	1 M 9.23	2 M 9.26	3 M 10.34	4 M 9.12	5 M 9.93	6 F 9.63	7 F 9.06	8 F 9.21								
			9 F 6.79	10 F 9.04	11 F 8.51	12 F 9.35	13 F 10.26	14 F 8.47										
7600B17	11.19	10.08	1 M 11.40	2 M 10.86	3 M 11.31	4 F 10.72	5 F 10.69	6 F 9.36	7 F 8.76	8 F 10.45								
			9 F 10.87	10 F 10.70	11 F 10.59	12 F 7.80	13 F 10.91											
7603B18	9.96	9.85	1 M 10.48	2 M 9.87	3 M 9.06	4 M 10.12	5 M 10.05	6 M 10.78	7 M 8.95	8 M 10.36								
			9 F 9.51	10 F 10.54	11 F 9.16	12 F 10.20	13 F s 0											
7520B19	11.14	10.35	1 M 11.27	2 M 11.01	3 M 10.62	4 M 11.78	5 M 11.01	6 F 10.75	7 F 8.12	8 F 10.93								
			9 F 10.57	10 F 10.93	11 F 10.02	12 F 10.51	13 F 10.99	14 M s 0										

D= DEAD, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 300.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7541B20	9.72	9.40	1 M 10.39	2 M 10.57	3 M 8.79	4 M 9.91	5 M 8.84	6 M 11.04	7 M 8.28	8 M 9.95	9 F D 0	10 F 9.06	11 F 9.30	12 F 8.86	13 F 9.92	14 F 9.86	15 M s 0	16 F s 0
7623B21	10.80	10.45	1 M 10.99	2 M 10.85	3 M 10.57	4 F 10.36	5 F 10.46	6 F 10.76	7 F 10.56	8 F 10.10	9 F 10.29	10 F 10.13	11 F 10.21	12 F 10.10	13 F 9.88	14 F 9.89	15 M s 0	16 F s 0
7631B22	10.43	10.09	1 M 10.73	2 M 10.84	3 M 10.54	4 M 10.16	5 M 10.39	6 M 9.94	7 F 10.14	8 F 10.07	9 F 10.06	10 F 10.43	11 F 10.66	12 F 10.73	13 F 10.10	14 F 9.54	15 M 10.05	16 F 8.36
7578B23	9.99	10.02	1 M 10.06	2 M 10.43	3 M 10.66	4 M 10.73	5 M 10.10	6 M 9.54	7 M 10.05	8 M 8.36	9 F 9.18	10 F 9.76	11 F 10.92	12 F 9.91	13 F 11.16	14 F 9.99	15 F 9.65	16 F 9.61
7527B24	11.08	10.85	1 M 10.86	2 M 10.80	3 M 10.90	4 M 11.52	5 M 11.32	6 F 10.77	7 F 11.67	8 F 11.21	9 F 10.56	10 F 10.54	11 F 10.36	12 M s 0	13 F s 0	14 F s 0	15 M s 0	16 F s 0
7524B25	13.42	12.90	1 M 13.42	2 F 11.82	3 F 13.03	4 F 13.64	5 F 13.12	6 M 10.57	7 F 9.90	8 F 10.61	9 F 10.02	10 F 9.89	11 F 9.82	12 F 10.00	13 F 10.15	14 F 9.97	15 M 10.82	16 F 9.63
7552B26	10.45	10.04	1 M 10.13	2 M 11.09	3 M 10.08	4 M 10.33	5 M 10.48	6 M 10.57	7 F 9.90	8 F 10.61	9 F 10.02	10 F 9.89	11 F 9.82	12 F 10.00	13 F 10.15	14 F 9.97	15 M 10.82	16 F 9.63
7590B27	10.62	9.55	1 M 10.61	2 M 11.05	3 M 10.20	4 F M 1	5 F 10.35	6 F 8.76	7 F 10.66	8 F 8.25	9 F 8.73	10 F 9.71	11 F 10.38	12 F 10.07	13 F 9.09	14 F 9.72	15 M 10.07	16 F 9.63
7566B28	9.69	9.89	1 M 10.16	2 M 9.74	3 M 10.07	4 M 9.09	5 M 9.72	6 M 10.07	7 M 10.82	8 M 9.63	9 M 7.95	10 F 9.86	11 F 9.80	12 F 10.69	13 F 8.72	14 F 10.36	15 M s 0	16 F s 0
MEAN	10.46	9.96																
S.D.	0.99	0.90																
N	27	27																

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 1000.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7550C01	12.03	11.08	1 M 12.06	2 M 12.32	3 M 12.31	4 M 11.41	5 F 11.30	6 F 10.63	7 F 10.67	8 F 11.73								
7588C02	9.85	9.18	1 M 9.78	2 M 9.98	3 M 9.76	4 M 9.73	5 M 9.75	6 M 10.03	7 M 10.14	8 M 10.12								
7556C03	9.17	9.08	9 M 9.34	10 F 9.56	11 F 9.22	12 F 9.92	13 F 8.70	14 F 9.50										
7633C04	7.96	8.06	1 M 9.15	2 M 8.95	3 M 9.82	4 M 9.73	5 M 9.33	6 M 9.08	7 M 8.69	8 M 7.82								
7533C05	10.88	10.34	9 M 9.65	10 M 9.50	11 F 9.35	12 F 9.36	13 F 8.73	14 F 9.58	15 F 8.38									
7504C06	9.87	9.49	1 M 8.50	2 M 8.06	3 M 8.11	4 M 8.69	5 M 6.32	6 M 8.17	7 M 7.88	8 F 8.23								
7582C07	10.22	10.17	9 F 7.75	10 F 7.76	11 F 7.33	12 F 8.65	13 F 8.62											
7624C08	9.83	9.80	1 M 10.74	2 M 11.63	3 M 10.93	4 M 10.38	5 M 10.73	6 M 11.61	7 M 10.12	8 F 10.50								
7542C09	10.72	10.71	9 F 10.84	10 F 10.37	11 F 10.24	12 F 10.99	13 F 9.08											
7543C10	13.08	13.54	1 M 10.59	2 M 10.17	3 M 9.36	4 M 9.12	5 M 10.09	6 F 8.87	7 F 9.24	8 F 9.52								
7572C11	10.57	10.06	9 F 9.56	10 F 10.50	11 F 9.61	12 F 9.37	13 F 9.38	14 F 9.07	15 F 9.77									
7573C12	12.56	11.43	1 M 10.30	2 M 10.05	3 M 9.90	4 M 10.62	5 F 9.75	6 F 10.64	7 F 10.36	8 F 10.98								
7616C13	9.01	8.73	9 F 9.61	10 F 10.15	11 F 9.99	12 F 9.90	13 F 10.13											
7540C14	10.45	10.28	1 M 10.06	2 M 10.30	3 M 10.17	4 M 9.65	5 M 9.87	6 M 8.92	7 F 10.80	8 F 9.51								
7617C15	8.83	8.89	9 F 10.37	10 F 9.10	11 F 9.19	12 F 10.07	13 F 9.46	14 F 9.89										
7565C16	10.47	9.73	1 M 11.04	2 M 10.73	3 M 10.15	4 M 11.19	5 M 10.41	6 M 11.49	7 M 10.55	8 M 10.24								
7516C17	10.10	9.38	9 F 10.91	10 F 11.09	11 F 10.13	4 F 13.43												
7625C18	12.63	12.44	1 M 13.16	2 M 13.00	3 F 13.64	4 F 10.76	5 M 10.50	6 M 10.88	7 M 10.57	8 M 10.45								
7626C19	10.41	10.02	1 M 9.90	2 M 10.51	3 M 11.40	4 M 10.76	5 M 10.50	6 M 10.88	7 M 10.57	8 M 10.45								
			9 M 10.15	10 M 10.58	11 F 10.13	12 F 10.55	13 F 9.62	14 F 10.75	15 F 9.25									
			1 M 12.76	2 M 12.78	3 M 12.90	4 M 11.87	5 M 13.05	6 M 12.20	7 M 12.38	8 F 10.37								
			9 F 11.83	10 F 12.09	11 M s 0													
			1 M 8.10	2 M 8.20	3 M 9.00	4 M 8.80	5 M 9.70	6 M 9.80	7 M 9.50	8 M 8.80								
			9 M 9.60	10 M 9.30	11 M 8.30	12 F 9.00	13 F 8.80	14 F 9.80	15 F 8.40	16 F 8.30								
			17 F 8.70	18 F 8.10														
			1 M 9.91	2 M 9.81	3 M 11.07	4 M 10.31	5 M 10.71	6 M 10.55	7 M 10.78	8 F 11.68								
			9 F 11.15	10 F 9.50	11 F 9.99	12 F 10.04	13 F 9.13	14 F 10.48										
			1 M 8.22	2 M 9.61	3 M 7.28	4 M 8.23	5 M 8.36	6 M 9.45	7 M 8.89	8 M 9.82								
			9 M 8.31	10 M 9.52	11 F 7.98	12 F 10.16	13 F 8.40	14 F 8.88	15 F 8.58	16 F 8.52								
			17 F 9.72															
			1 M 10.99	2 M 10.53	3 M 10.59	4 M 10.45	5 M 9.77	6 F 9.55	7 F 10.39	8 F 8.98								
			9 F 9.99	10 F 9.82	11 F 10.15	12 F 9.24	13 F 9.72											
			1 M 9.61	2 M 10.41	3 M 10.29	4 F M 1	5 F 9.07	6 F 9.73	7 F 8.89	8 F 9.30								
			9 F 10.02	10 F 8.43	11 F 9.44	12 F 8.69	13 F 10.09	14 F 10.16										
			1 M 12.55	2 M 11.10	3 M 14.25	4 F M 1	5 F 12.12	6 F 12.97	7 F 10.86	8 F 13.49								
			9 F 11.51	10 F 13.69														
			1 M 11.21	2 M 10.92	3 M 10.74	4 M 10.31	5 M 9.75	6 M 9.54	7 F 9.06	8 F 9.60								
			9 F 11.38	10 F 9.94	11 F 10.39	12 F 10.06	13 F 9.32	14 F 10.15	15 F 10.46	16 F 9.82								

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 1000.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7559C20	10.89	10.53	1 M 9.90 9 M s 0	2 M 11.26	3 M 10.94	4 M 11.49	5 M 10.88	6 F 10.49	7 F 10.02	8 F 11.08								
7546C21	10.07	9.55	1 M 9.39 9 F 10.02	2 M 9.64	3 M 10.74	4 M 10.19	5 M 10.40	6 F 9.48	7 F 8.73	8 F 9.11								
7571C22	10.22	9.96	1 M 10.35 9 F 9.91	2 M 9.92	3 M 10.79	4 M 9.69	5 M 10.34	6 F 9.76	7 F 10.22	8 F 9.36								
7606C23	10.13	9.99	1 M 9.83 9 M 10.58	2 M 10.71	3 M 9.82	4 M 10.11	5 M 9.69	6 M 10.18	7 M 10.80	8 M 9.27								
7498C24	8.88	9.04	1 M D 1 9 F 9.26	2 M 9.24	3 M 10.07	4 M 9.11	5 M 7.66	6 M 8.71	7 M 7.86	8 M 9.53								
			17 F 8.87	10 F 9.18	11 F 10.41	12 F 8.70	13 F 9.17	14 F 8.11	15 F 7.97	16 F 9.72								
7615C25	12.50	12.58	1 M 12.77 9 F 12.35	2 M 12.45	3 M 11.83	4 M 12.95	5 F 12.30	6 F 12.59	7 F 13.10	8 F 12.58								
7612C26	7.85	7.50	1 M 6.52 9 F M 1	2 M 8.01	3 M 7.60	4 M 8.52	5 M 8.52	6 M 8.17	7 M 7.53	8 M 7.95								
			17 F 8.02	18 F D 0	19 F s 0	12 F 8.13	13 F 6.60	14 F 7.57	15 F 8.00	16 F 7.04								
7589C27	7.51	7.26	1 M 7.73 9 F 7.79	2 M 7.73	3 M 7.89	4 M 6.70	5 M 7.86	6 M 7.84	7 M 6.84	8 F 7.51								
7502C28	9.91	9.68	1 M 10.20 9 F 8.85	2 M 9.18	3 M 10.54	4 M 10.40	5 M 9.16	6 M 10.26	7 M 9.61	8 F 9.83								
			10 F 9.83	11 F 9.30	12 F 10.49	13 F 9.48	14 F 9.52	15 F 9.62	16 F 10.24									
MEAN	10.24	9.95																
S.D.	1.42	1.40																
N	28	28																

D= DEAD, C= CANNIBALIZED, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 2000.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7495D01	9.33	8.51	1 M 9.71	2 M 9.88	3 M 9.53	4 M 9.72	5 M 8.18	6 M 9.71	7 M 9.93	8 M 8.53								
7539D02	11.80	11.31	9 M 8.78	10 F 8.91	11 F 8.00	12 F 8.79	13 F 9.82	14 F 8.69	15 F 6.85									
7519D03	9.26	8.80	1 M 12.27	2 M 11.07	3 M 12.38	4 M 12.48	5 M 12.40	6 M 10.21	7 M 11.78	8 F 11.34								
7515D04	9.08	8.71	9 F 11.39	10 F 11.11	11 F 11.40													
7568D05	9.89	9.64	1 M 9.56	2 M 8.97	3 M 9.37	4 M 9.50	5 M 9.04	6 M 9.11	7 F 8.83	8 F 8.74								
7636D06	10.43	10.44	9 F 8.93	10 F 8.85	11 F 9.11	12 F 8.35												
7545D07	11.95	10.68	1 M 9.29	2 M 9.31	3 M 8.27	4 M 9.11	5 M 9.44	6 F 8.58	7 F 9.10	8 F 8.17								
7575D08	9.25	8.94	9 F 9.00	10 F 8.61	11 F 8.29	12 F 8.17	13 F 9.49	14 F 8.99										
7584D09	9.28	9.13	1 M 9.75	2 M 8.22	3 M 10.68	4 M 10.21	5 M 10.55	6 M 9.74	7 M 9.77	8 M 10.19								
			9 F 9.78	10 F 9.36	11 F 10.04	12 F 9.40												
			1 M 10.62	2 M 10.42	3 M 10.14	4 M 10.46	5 M 10.50	6 F 9.72	7 F 10.49	8 F 10.21								
			9 F 11.11	10 F 10.53	11 F 10.55	12 F 10.48												
			1 M 12.86	2 M 12.39	3 M 11.22	4 M 12.60	5 M 10.67	6 M 11.98	7 F 10.79	8 F 10.56								
			1 M 9.67	2 M 8.47	3 M 9.12	4 M 9.25	5 M 9.70	6 M 9.10	7 M 9.42	8 F 9.00								
			9 F 9.31	10 F 9.58	11 F 8.58	12 F 8.61	13 F 8.97	14 F 8.24	15 F 9.22									
			1 M 9.44	2 M 8.80	3 M 8.96	4 M 9.77	5 M 9.42	6 M 9.64	7 M 8.59	8 M 9.60								
			9 F 9.11	10 F 8.78	11 F 9.37	12 F 9.46	13 F 8.40	14 F 9.08	15 F 10.32	16 F 8.02								
			17 F 9.65															
7610D10	10.16	10.05	1 M 10.00	2 M 9.65	3 M 10.07	4 M 11.06	5 M 9.95	6 M 10.22	7 F 9.08	8 F 10.20								
			9 F 10.38	10 F 9.50	11 F 10.22	12 F 9.63	13 F 11.31											
7536D11	9.87	9.38	1 M 10.02	2 M 9.82	3 M 9.48	4 M 9.96	5 M 9.99	6 M 10.11	7 M 9.74	8 F 9.09								
			9 F 9.01	10 F 9.75	11 F 9.67													
7591D12	10.78	9.85	1 M 10.27	2 M 11.00	3 M 11.07	4 F 10.37	5 F 9.98	6 F 9.21										
7554D13	10.10	9.87	1 M 9.58	2 M 8.94	3 M 10.75	4 M 10.76	5 M 10.36	6 M 10.19	7 F 9.99	8 F 9.92								
			9 F 9.61	10 F 11.04	11 F 9.69	12 F 10.10	13 F 8.71											
7557D14	10.73	10.23	1 M 10.77	2 M 10.27	3 M 11.16	4 F 10.22	5 F 10.21	6 F 9.87	7 F 10.34	8 F 11.17								
			9 F 10.63	10 F 9.88	11 F 10.37	12 F 9.41	13 F s 0											
7548D15	10.64	10.42	1 M 11.36	2 M 10.61	3 M 10.30	4 M 10.55	5 M 10.42	6 M 10.54	7 M 10.73	8 F M 1								
			9 F 10.16	10 F 10.36	11 F 10.56	12 F 10.59	13 F s 0											
7569D16	9.22	9.24	1 M 7.98	2 M 10.47	3 M 8.64	4 M 8.78	5 M 10.17	6 M 9.30	7 F 9.08	8 F 9.19								
			9 F 8.26	10 F 9.64	11 F 8.79	12 F 10.21	13 F 9.46	14 F 9.96	15 F 8.59									
7632D18	10.22	10.20	1 M 10.70	2 M 10.62	3 M 10.21	4 M 10.51	5 M 9.83	6 M 9.64	7 M 10.08	8 M 10.15								
			9 F 10.04	10 F 9.72	11 F 10.36	12 F 10.65	13 F 10.22											
7528D19	10.62	10.18	1 M 10.00	2 M 10.99	3 M 10.40	4 M 11.56	5 M 10.33	6 M 10.86	7 M 10.20	8 F 9.98								
			9 F 10.25	10 F 10.67	11 F 9.81	12 F 10.03	13 F 10.30	14 F 10.20	15 F D 0									
7547D20	11.50	11.03	1 M 11.99	2 M 11.48	3 M 11.38	4 M 11.58	5 M 11.09	6 F 11.37	7 F 11.27	8 F 10.36								
			9 F 11.44	10 F 10.73														

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 4 (PRE CULL)

LITTER	MEAN		P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S
	M	F	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E
			P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X
			WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
7549D21	9.70	8.77	1 M 10.05	2 M 10.49	3 M 10.39	4 M 10.33	5 M 9.82	6 M 9.19	7 M 9.59	8 M 7.76								
			9 F 9.42	10 F 9.45	11 F 8.71	12 F 8.52	13 F 8.10	14 F 9.16	15 F 8.05									
7583D22	11.38	11.10	1 M 11.00	2 M 11.20	3 M 11.20	4 M 11.10	5 M 12.40	6 M 11.40	7 F 11.30	8 F D 0								
			9 F 10.80	10 F 11.30	11 F 11.00	12 F 11.10												
7523D23	11.11	10.69	1 M 11.19	2 M 11.51	3 M 11.13	4 M 11.10	5 M 10.44	6 M 11.52	7 M 10.88	8 F 11.05								
			9 F 10.59	10 F 10.67	11 F 10.28	12 F 10.34	13 F 11.18											
7544D24	9.52	9.16	1 M 9.19	2 M 9.89	3 M 9.67	4 M 8.90	5 M 10.07	6 M 9.53	7 M 9.57	8 M 9.38								
			9 F M 0	10 F 9.17	11 F 8.49	12 F 8.94	13 F 9.45	14 F 9.76										
7637D25	9.92	9.82	1 M 9.95	2 M 10.12	3 M 10.86	4 M 9.68	5 M 10.03	6 M 8.89	7 F 9.38	8 F 10.23								
			9 F 9.74	10 F 9.88	11 F 9.36	12 F 10.35	13 M s 0											
7594D26	8.49	8.22	1 M 8.24	2 M 8.95	3 M 9.21	4 M 8.73	5 M 8.07	6 M 8.68	7 M 8.69	8 M 8.35								
			9 M 7.46	10 F 8.41	11 F 8.16	12 F 8.65	13 F 7.66											
7596D27	10.13	9.66	1 M 9.22	2 M 10.84	3 M 10.50	4 M 10.11	5 M 9.98	6 M 10.90	7 M 9.95	8 M 9.62								
			9 M 9.75	10 M 10.46	11 F 10.18	12 F 9.86	13 F 8.79	14 F 9.80										
7510D28	10.21	9.56	1 M 11.07	2 M 10.48	3 M 9.98	4 M 10.12	5 M 9.40	6 M 10.23	7 F 9.30	8 F 9.24								
			9 F 9.55	10 F 10.02	11 F 10.04	12 F 9.40	13 F 9.85	14 F 9.08										
MEAN	10.17	9.76																
S.D.	0.88	0.83																
N	27	27																

D= DEAD, M= MISSING, s= STILLBORN



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (POST CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 0.0 PPM													
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7529A01	10.50	10.01	1 M 10.31 9 F c 10 F	2 M 10.42 c 11 F	3 M 10.69 c 12 F	4 M 10.59 c 13 F	5 M s 0 c 14 F	6 F c 7 F	c 7 F	9.92	8 F 10.35					
7634A02	8.21	7.61	1 M 8.03 9 M c 10 F	2 M c 11 F	3 M c 12 F	4 M c 13 F	5 M 8.33 c 14 F	6 M 8.24 c 15 F	7 M c 8 M	8.25	16 F c					
7505A03	12.20	12.57	1 M 11.70 9 F 7.21	2 M 12.71 c 11 F	3 F 12.95 c 12 F	4 F 12.01 c 13 F	5 F 13.02 c 14 F	6 F 12.28 c 15 F	7 M 9.83	8 F 9.10						
7513A04	9.53	9.01	1 M 9.30 9 F 7.21	2 M c 11 F	3 M c 12 F	4 M c 13 F	5 M 9.70 c 14 F	6 M 9.90 c 15 F	7 F c 8 F	c						
7517A05	9.63	9.73	1 M 8.60 9 F 9.80	2 M c 11 F	3 M c 12 F	4 M c 13 F	5 M 9.90 c 14 F	6 M 10.30 c 15 F	7 F c 8 F	c						
7601A06	12.16	11.40	1 M 12.16 9 F 11.67	2 M 11.34 s 0 11	3 M 11.34 s 0 11	4 F 11.34 s 0 11	5 F 11.02 c 14 F	6 F 11.27 c 15 F	7 F 12.14	8 F 10.97						
7503A07	9.07	8.54	1 M c 2 M 9 M c 10 F	3 M 9.09 c 11 F	4 M 8.81 c 12 F	5 M c 6 M	6 M 8.68 c 14 F	7 M c 8 M	9.71	8 M c						
7611A08	7.33	8.51	1 M 8.56 9 F c 10 F	2 M 7.96 c 11 F	3 M 5.85 c 12 F	4 M 6.94 c 13 F	5 F c 6 F	6 F c 7 F	8.92	8 F 8.90						
7605A09	9.31	8.94	1 D 1 2 M 9 F 8.42	3 M 9.58 c 11 F	4 M c 5 M	5 M 9.13 c 12 F	6 M 9.16 c 13 F	7 M c 8 M	9.35	c						
7593A10	10.73	9.81	1 M 10.96 9 F 9.85	2 M 10.77 c 11 F	3 M 10.24 c 12 F	4 M 10.96 c 13 F	5 M c 6 F	6 F c 7 F	10.34	8 F 9.33						
7512A11	9.03	9.40	1 M 8.62 9 M 8.62	2 M 9.74 c 11 F	3 M 8.09 c 12 F	4 M c 5 M	5 M 9.94 c 13 F	6 M c 7 M	c 8 M	9.46						
7638A12	9.81	9.76	1 M 10.45 9 F c 10 F	2 M c 11 F	3 M 8.88 c 12 F	4 M c 5 M	5 M c 6 M	6 M 10.23 c 14 F	7 M 9.68	8 M c						
7628A13	10.78	9.99	1 M 10.22 9 M 11.12	2 M c 11 F	3 M c 12 F	4 M 11.00 c 13 F	5 M c 6 M	6 M c 7 M	c 8 M	10.76						
7639A14	9.78	9.43	1 M 9.95 9 M c 10 F	2 M c 11 F	3 M 10.36 c 12 F	4 M 8.49 c 13 F	5 M 10.11 c 14 F	6 M c 7 M	10.83	8 M 8.95						
7618A15	9.64	8.71	1 M 8.65 9 M 9.82	2 M c 11 F	3 M c 12 F	4 M 9.74 c 13 F	5 M 9.91 c 14 F	6 M c 7 M	c 8 M	c						
7555A16	12.89	12.09	1 M 13.28 9 M c 10 F	2 M 12.50 c 11 F	3 F 12.37 c 12 F	4 F 11.61 c 13 F	5 F 12.28 c 14 F	6 F c 7 M	11.35	8 M 10.60						
7609A17	10.98	9.96	1 M c 2 M 9 M 4 10 F	3 M c 11 F	4 M c 12 F	5 M 11.32 c 13 F	6 M 10.37 c 14 F	7 M 11.25	8 M 10.60							
7643A18	9.77	9.87	1 D 4 2 M 9 M 9.77	3 M c 11 F	4 M c 12 F	5 M 9.21 c 13 F	6 M c 7 M	7 M c 8 M	9.41							
7635A19	9.25	8.61	1 M 8.91 9 F c 10 F	2 M c 11 F	3 M 10.15 c 12 F	4 M c 5 M	5 M 9.12 c 13 F	6 M c 7 M	c 8 M	8.83						

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (POST CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 0.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7629A20	10.39	10.24	1 M 10.10	2 M 11.25	3 M 10.42	4 M 9.77	5 F 10.29	6 F	c	7 F	c	8 F	10.08					
			9 F 10.71	10 F	c 11 F 9.88	12 F	c											
7620A21	11.08	10.48	1 M	c 2 M	c 3 M 10.12	4 M	c 5 M 11.43	6 M	c 7 M 10.91	8 M	c							
			9 M 11.86	10 F 10.92	11 F 10.80	12 F	c 13 F	c 14 F	c 15 F 11.10	16 F 9.08								
7511A22	10.02	9.86	1 M 10.63	2 M	c 3 M	c 4 M	c 5 M 9.34	6 M 9.79	7 M	c 8 M 10.31								
			9 M	c 10 F	c 11 F 9.52	12 F	c 13 F 10.47	14 F 9.40	15 F 10.03									
7619A23	11.08	10.43	1 M	c 2 M	c 3 M 10.50	4 M	c 5 M	c 6 M 11.61	7 M 11.15	8 M 11.08								
			9 F	c 10 F 9.99	11 F 10.41	12 F	c 13 F 10.66	14 F 10.67										
7522A24	9.33	8.87	1 M	c 2 M 9.60	3 M	c 4 M	c 5 M 8.85	6 M 8.73	7 M 10.14	8 M	c							
			9 M	c 10 F	c 11 F 9.98	12 F 8.18	13 F 8.93	14 F	c 15 F 8.39									
7563A25	8.91	9.33	1 M	c 2 M 8.92	3 M	c 4 M 9.94	5 M 8.60	6 M 8.20	7 F	c 8 F 9.44								
			9 F 9.49	10 F	c 11 F	c 12 F 9.41	13 F 8.99	14 F	c 15 F	c 16 F	c							
7586A26	11.35	10.45	1 M 10.63	2 M 11.23	3 M 11.90	4 M 11.65	5 F 10.97	6 F	c 7 F	c 8 F 10.29								
			9 F 10.11	10 F 10.45														
7531A27	12.00	12.04	1 M 10.68	2 M 12.94	3 M 12.58	4 M 11.79	5 F 12.55	6 F 11.21	7 F 11.87	8 F	c							
			9 F 12.54															
7598A28	8.70	7.93	1 M 8.57	2 M 9.20	3 M 8.16	4 M	c 5 M 8.86	6 F	c 7 F 7.29	8 F	c							
			9 F 7.78	10 F 8.23	11 F 8.42	12 F	c 13 F	c 14	s 0									
MEAN	10.12	9.77																
S.D.	1.29	1.20																
N	28	28																

s= STILLBORN

c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (POST CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 300.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7621B01	10.36	9.25	1 M 9 F	c 8.75	2 M 10 F	10.42 c	3 M 11 F	10.08 8.41	4 M 12 F	10.48 9.98	5 M c	10.47	6 M c	7 M c	8 F c	9.86		
7509B02	11.95	11.53	1 M 9 F	11.63 12.11	2 M 10 F	11.81 c	3 M 11 F	12.51 8.93	4 M c	5 M c	11.64	6 M 12.15	7 F 10.96	8 F 11.51				
7532B03	9.67	9.10	1 M 9 F	c c	2 M 10 F	9.50 10.50	3 M 11 F	10.07 8.93	4 M 12 F	c c	5 M c	10.22	6 M 8.89	7 F 8.23	8 F 8.72			
7508B04	9.75	8.85	1 M 9 F	D c	2 M 10 F	8.37 c	3 M 11 F	c 9.72	4 M 12 F	c 9.31	5 M 13 F	c 7.95	6 M 14 F	9.49 8.41	7 M 9.24	8 M 11.91		
7538B05	9.95	9.99	1 M 9 F	9.92 10.00	2 M 10 F	c 10.06	3 M 11 F	9.59 9.61	4 M 12 F	10.36 10.27	5 M 13	c s 0	6 M 14	c s 0	7 M 9.95	8 M c		
7579B06	9.60	9.50	1 M 9 F	9.90 9.30	2 M 10 F	c 9.60	3 M 11 F	c c	4 M 12 F	9.20 c	5 M 13 F	9.80 c	6 M 14 F	9.50 9.50	7 M 15 F	c 9.60	8 16	D 1 s 0
7537B07	12.13	11.28	1 M 9 F	11.90 12.21	2 M 10	12.36 D 0	3 M c	11.93 c	4 M c	11.49 c	5 M c	12.41	6 M c	7 M 12.70	8 F 10.34			
7574B08	10.41	9.31	1 M 9 M	c 10.44	2 M 10 M	11.78 c	3 M 11 M	c 9.96	4 M 12 F	c 9.05	5 M 13 F	10.28 9.39	6 M 14 F	9.60 9.48	7 M c	8 M c		
7627B09	11.33	9.65	1 M 9 F	c 10.83	2 M 10 F	c 10.45	3 M 11 F	11.80 10.10	4 M 12 F	11.51 7.24	5 M 13	c s 0	6 M c	7 M 10.81	8 M 11.19			
7561B10	10.75	10.37	1 M 9 F	10.97 9.80	2 M 10 F	11.00 10.68	3 M 11 F	10.38 10.10	4 M 12 F	10.64 c	5 F c	6 F 10.88	7 F c	8 F c				
7608B11	9.39	8.75	1 M 9 F	9.32 7.61	2 M 10 F	9.71 8.97	3 M 11 F	9.68 c	4 M 12 F	c c	5 M 13 F	c 9.01	6 M 14 F	8.84 9.39	7 F 15 F	c c	8 F c	
7564B12	10.57	10.14	1 M 9 F	9.57 10.97	2 M 10 F	10.92 9.70	3 M 11 F	11.14 9.50	4 M 12 F	10.66 10.39	5 M c	6 F c	7 F c	8 F c				
7630B13	8.90	8.91	1 M 9 F	9.30 c	2 M 10 F	c c	3 M 11 F	8.72 c	4 M 12 F	9.20 8.98	5 M 13 F	c 9.10	6 M 14 F	8.39 c	7 M 15 F	c 8.98	8 F c	8.60
7518B14	10.23	9.58	1 M 9 F	10.30 9.64	2 M 10 F	10.19 9.62	3 M 11 F	10.18 c	4 M 12 F	c 10.02	5 M c	6 M 10.24	7 F c	8 F c	9.04			
7585B15	9.66	8.72	1 M 9 F	c 6.79	2 M 10 F	9.26 c	3 M 11 F	10.34 c	4 M 12 F	9.12 9.35	5 M 13 F	9.93 10.26	6 F 14 F	c 8.47	7 F c	8 F c		
7600B17	11.19	10.28	1 M 9 F	11.40 c	2 M 10 F	10.86 c	3 M 11 F	11.31 10.59	4 F 12 F	c c	5 F 13 F	10.69 10.91	6 F c	7 F c	8 F c	10.45		
7603B18	9.56	9.85	1 M 9 F	c 9.51	2 M 10 F	9.87 10.54	3 M 11 F	9.06 9.16	4 M 12 F	c 10.20	5 M 13	c s 0	6 M c	7 M c	8 M 8.95	10.36		
7520B19	11.17	10.02	1 M 9 F	11.27 c	2 M 10 F	11.01 c	3 M 11 F	10.62 10.02	4 M 12 F	11.78 c	5 M 13 F	c 10.99	6 F 14	c s 0	7 F 8.12	8 F 10.93		

D= DEAD, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 300.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7541B20	10.32	9.27	1 M 10.39 9 D 0	2 M c 10 F 9.06	3 M c 11 F 9.30	4 M 9.91 12 F 8.86	5 M c 13 F c	6 M 11.04 14 F 9.86	7 M c 15 s 0	8 M 9.95 16 s 0	
7623B21	10.80	10.45	1 M 10.99	2 M 10.85	3 M 10.57	4 F 10.36	5 F 10.46	6 F 10.76	7 F 10.56	8 F 10.10	
7631B22	10.57	10.09	1 M 10.73	2 M 10.84	3 M 10.54	4 M 10.16	5 M c	6 M c	7 F c	8 F 10.07	
			9 F 10.29	10 F c	11 F c	12 F 10.10	13 F c	14 F 9.89			
7578B23	9.61	9.94	1 M c	2 M 10.43	3 M c	4 M c	5 M 10.10	6 M 9.54	7 M c	8 M 8.36	
			9 F 9.18	10 F 9.76	11 F c	12 F c	13 F 11.16	14 F c	15 F 9.65	16 F c	
7527B24	11.13	11.00	1 M c	2 M 10.80	3 M 10.90	4 M 11.52	5 M 11.32	6 F c	7 F 11.67	8 F 11.21	
			9 F 10.56	10 F 10.54	11 F c	12 s 0	13 s 0	14 s 0			
7524B25	13.42	12.90	1 M 13.42	2 F 11.82	3 F 13.03	4 F 13.64	5 F 13.12				
7552B26	10.55	9.98	1 M c	2 M 11.09	3 M 10.08	4 M c	5 M 10.48	6 M 10.57	7 F 9.90	8 F c	
			9 F c	10 F 9.89	11 F c	12 F c	13 F 10.15	14 F 9.97			
7590B27	10.62	9.48	1 M 10.61	2 M 11.05	3 M 10.20	4 M 1	5 F 10.35	6 F c	7 F c	8 F 8.25	
			9 F 8.73	10 F 9.71	11 F 10.38						
7566B28	10.09	10.18	1 M c	2 M 9.74	3 M 10.07	4 M c	5 M 9.72	6 M c	7 M 10.82	8 M c	
			9 M c	10 F 9.86	11 F 9.80	12 F 10.69	13 F c	14 F 10.36	15 s 0		
MEAN	10.51	9.94									
S.D.	0.97	0.93									
N	27	27									

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (POST CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 1000.0 PPM															
LITTER	MEAN		P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	
7550C01	12.03	11.08	1 M 12.06	2 M 12.32	3 M 12.31	4 M 11.41	5 F 11.30	6 F 10.63	7 F 10.67	8 F 11.73								
7588C02	9.91	9.30	1 M 9.78	2 M c	3 M c	4 M 9.73	5 M c	6 M 10.03	7 M c	8 M 10.12								
7556C03	9.29	8.95	9 M c	10 F 9.56	11 F 9.22	12 F 8.92	13 F c	14 F 9.50										
7633C04	8.37	8.31	1 M 9.15	2 M 8.95	3 M c	4 M 9.73	5 M c	6 M 9.33	7 M c	8 M c								
7533C05	10.85	10.23	9 M c	10 M c	11 F 9.35	12 F 9.36	13 F c	14 F 8.73	15 F c	16 F 8.38								
7504C06	9.79	9.43	1 M 8.50	2 M c	3 M c	4 M 8.69	5 M c	6 M 8.17	7 M c	8 F 8.23								
7582C07	10.22	10.34	9 F 7.75	10 F c	11 F c	12 F 8.65	13 F c	14 F 8.62										
7624C08	9.94	9.61	1 M 10.74	2 M c	3 M c	4 M c	5 M c	6 M c	7 M c	8 F 10.50								
7542C09	10.81	10.71	9 F c	10 F c	11 F 10.37	12 F c	13 F 10.99	14 F c	15 F 9.08									
7543C10	13.08	13.54	1 M 10.59	2 M c	3 M c	4 M 9.36	5 M c	6 M 9.12	7 F c	8 F c								
7572C11	10.66	10.17	9 F c	10 F c	11 F c	12 F c	13 F c	14 F c	15 F c	16 F c								
7573C12	12.57	11.43	1 M 10.30	2 M 10.05	3 M 9.90	4 M 10.62	5 F c	6 M c	7 F c	8 F c								
7616C13	8.95	8.78	9 F c	10 F c	11 F c	12 F c	13 F c	14 F c	15 F c	16 F c								
7540C14	10.39	10.33	1 M 10.06	2 M c	3 M c	4 M 9.65	5 M c	6 M c	7 F c	8 F c								
7617C15	9.30	8.89	9 F 10.37	10 F c	11 F c	12 F c	13 F c	14 F c	15 F c	16 F c								
7565C16	10.43	9.40	1 M 11.04	2 M 10.73	3 M c	4 M c	5 M c	6 M c	7 M c	8 M c								
7516C17	10.10	9.52	9 F 10.91	10 F c	11 F c	12 F c	13 F c	14 F c	15 F c	16 F c								
7625C18	12.63	12.23	1 M 13.16	2 M 13.00	3 M 13.64	4 M c	5 M c	6 M c	7 M c	8 F c								
7626C19	10.43	10.40	9 M 10.15	10 M c	11 F c	12 F c	13 F c	14 F c	15 F c	16 F c								

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN		P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S
	M	F	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E
			P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT
7559C20	10.89	10.53	1 M 9.90	2 M 11.26	3 M 10.94	4 M 11.49	5 M 10.88	6 F 10.49	7 F 10.02	8 F 11.08								
			9 s 0															
7546C21	9.90	9.70	1 M 9.39	2 M 9.64	3 M c	4 M 10.19	5 M 10.40	6 F c	7 F c	8 F c								
			9 F c	10 F 9.46	11 F 9.74	12 F c	13 F 9.73	14 F 9.89										
7571C22	10.19	10.00	1 M 10.35	2 M 9.92	3 M 10.79	4 M 9.69	5 M c	6 F c	7 F c	8 F 9.36								
			9 F 9.91	10 F 10.53	11 D 0	12 C 0												
7606C23	10.12	9.99	1 M c	2 M 10.71	3 M c	4 M 10.11	5 M 9.69	6 M c	7 M c	8 M c								
			9 M 10.58	10 M 9.49	11 M c	12 F 8.92	13 F 10.50	14 F 10.54										
7498C24	8.89	9.43	1 D 1	2 M c	3 M 10.07	4 M 9.11	5 M 7.66	6 M 8.71	7 M c	8 M c								
			9 F 9.26	10 F 9.18	11 F 10.41	12 F c	13 F c	14 F c	15 F c	16 F c								
			17 F 8.87															
7615C25	12.50	12.46	1 M 12.77	2 M 12.45	3 M 11.83	4 M 12.95	5 F 12.30	6 F 12.59	7 F c	8 F 12.58								
			9 F 12.35															
7612C26	7.79	7.69	1 M 6.52	2 M c	3 M 7.60	4 M 8.52	5 M 8.52	6 M c	7 M c	8 M c								
			9 M 1 10	D 1	11 F 7.15	12 F c	13 F c	14 F 7.57	15 F 8.00	16 F c								
			17 F 8.02	18 D 0	19 s 0													
7589C27	7.28	6.82	1 M c	2 M 7.73	3 M c	4 M 6.70	5 M c	6 M 7.84	7 M 6.84	8 F c								
			9 F 7.79	10 F c	11 F c	12 F 6.48	13 F c	14 F 7.17	15 F c	16 F 5.83								
7502C28	9.88	9.64	1 M 10.20	2 M c	3 M 10.54	4 M c	5 M 9.16	6 M c	7 M 9.61	8 F 9.83								
			9 F c	10 F 9.83	11 F 9.30	12 F c	13 F c	14 F c	15 F c	16 F c								
MEAN	10.26	9.96																
S.D.	1.40	1.39																
N	28	28																

D= DEAD, C= CANNIBALIZED, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (POST CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 2000.0 PPM															
LITTER	MEAN		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT	
	M	F																
7495D01	9.08	8.85	1 M	c	2 M	9.88	3 M	c	4 M	c	5 M	8.18	6 M	9.71	7 M	c	8 M	8.53
7539D02	11.82	11.31	9 M	c	10 F	8.91	11 F	8.00	12 F	c	13 F	9.82	14 F	8.69	15 F	c		
			1 M	12.27	2 M	c	3 M	12.38	4 M	c	5 M	12.40	6 M	10.21	7 M	c	8 F	11.34
7519D03	9.22	8.69	9 F	11.39	10 F	11.11	11 F	11.40										
			1 M	c	2 M	8.97	3 M	9.37	4 M	9.50	5 M	9.04	6 M	c	7 F	8.83	8 F	8.74
7515D04	9.29	8.61	9 F	c	10 F	8.85	11 F	c	12 F	8.35								
			1 M	9.29	2 M	9.31	3 M	c	4 M	9.11	5 M	9.44	6 F	c	7 F	c	8 F	c
7568D05	10.06	9.64	9 F	9.00	10 F	c	11 F	8.29	12 F	8.17	13 F	c	14 F	8.99				
			1 M	9.75	2 M	c	3 M	c	4 M	c	5 M	10.55	6 M	9.74	7 M	c	8 M	10.19
7636D06	10.38	10.32	9 F	9.78	10 F	9.36	11 F	10.04	12 F	9.40								
			1 M	c	2 M	10.42	3 M	10.14	4 M	10.46	5 M	10.50	6 F	9.72	7 F	c	8 F	c
7545D07	11.95	10.68	9 F	c	10 F	10.53	11 F	10.55	12 F	10.48								
			1 M	12.86	2 M	12.39	3 M	11.22	4 M	12.60	5 M	10.67	6 M	11.98	7 F	10.79	8 F	10.56
7575D08	9.21	9.19	1 M	c	2 M	8.47	3 M	c	4 M	9.25	5 M	9.70	6 M	c	7 M	9.42	8 F	9.00
			9 F	c	10 F	9.58	11 F	c	12 F	c	13 F	8.97	14 F	c	15 F	9.22		
7584D09	9.20	9.37	1 M	9.44	2 M	8.80	3 M	8.96	4 M	c	5 M	c	6 M	c	7 M	c	8 M	9.60
			9 F	9.11	10 F	c	11 F	c	12 F	c	13 F	8.40	14 F	c	15 F	10.32	16 F	c
7610D10	10.18	10.07	17 F	9.65														
			1 M	c	2 M	9.65	3 M	10.07	4 M	11.06	5 M	9.95	6 M	c	7 F	9.08	8 F	c
7536D11	9.84	9.38	9 F	10.38	10 F	9.50	11 F	c	12 F	c	13 F	11.31						
			1 M	10.02	2 M	c	3 M	9.48	4 M	c	5 M	c	6 M	10.11	7 M	9.74	8 F	9.09
7591D12	10.78	9.85	9 F	9.01	10 F	9.75	11 F	9.67										
			1 M	10.27	2 M	11.00	3 M	11.07	4 F	10.37	5 F	9.98	6 F	9.21				
7554D13	10.36	9.96	1 M	9.58	2 M	c	3 M	10.75	4 M	10.76	5 M	10.36	6 M	c	7 F	9.99	8 F	c
			9 F	c	10 F	11.04	11 F	c	12 F	10.10	13 F	8.71						
7557D14	10.73	10.20	1 M	10.77	2 M	10.27	3 M	11.16	4 F	c	5 F	10.21	6 F	9.87	7 F	10.34	8 F	11.17
			9 F	c	10 F	c	11 F	c	12 F	9.41	13	s 0						
7548D15	10.73	10.42	1 M	11.36	2 M	c	3 M	10.30	4 M	c	5 M	c	6 M	10.54	7 M	10.73	8	M 1
			9 F	10.16	10 F	10.36	11 F	10.56	12 F	10.59	13	s 0						
7569D16	9.52	8.89	1 M	c	2 M	10.47	3 M	8.64	4 M	8.78	5 M	10.17	6 M	c	7 F	9.08	8 F	c
			9 F	8.26	10 F	9.64	11 F	c	12 F	c	13 F	c	14 F	c	15 F	8.59		
7632D18	10.20	10.16	1 M	c	2 M	10.62	3 M	10.21	4 M	c	5 M	9.83	6 M	c	7 M	c	8 M	10.15
			9 F	10.04	10 F	9.72	11 F	c	12 F	10.65	13 F	10.22						
7528D19	10.43	10.18	1 M	10.00	2 M	10.99	3 M	10.40	4 M	c	5 M	10.33	6 M	c	7 M	c	8 F	9.98
			9 F	10.25	10 F	10.67	11 F	9.81	12 F	c	13 F	c	14 F	c	15	D 0		
7547D20	11.38	10.95	1 M	c	2 M	11.48	3 M	11.38	4 M	11.58	5 M	11.09	6 F	c	7 F	11.27	8 F	10.36
			9 F	11.44	10 F	10.73												

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN		P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
	M	F									
7549D21	9.68	8.70	1 M 10.05	2 M c	3 M c	4 M c	5 M 9.82	6 M 9.19	7 M 9.59	8 M c	
			9 F c	10 F 9.45	11 F 8.71	12 F 8.52	13 F 8.10	14 F c	15 F c		
7583D22	11.22	11.18	1 M c	2 M 11.20	3 M 11.20	4 M 11.10	5 M c	6 M 11.40	7 F 11.30	8 D	0
			9 F c	10 F 11.30	11 F 11.00	12 F 11.10					
7523D23	11.16	10.60	1 M c	2 M c	3 M 11.13	4 M 11.10	5 M c	6 M 11.52	7 M 10.88	8 F c	
			9 F 10.59	10 F c	11 F 10.28	12 F 10.34	13 F 11.18				
7544D24	9.51	9.16	1 M 9.19	2 M 9.89	3 M c	4 M 8.90	5 M 10.07	6 M c	7 M c	8 M c	
			9 M 0	10 F c	11 F 8.49	12 F 8.94	13 F 9.45	14 F 9.76			
7637D25	10.13	9.83	1 M 9.95	2 M c	3 M 10.86	4 M 9.68	5 M 10.03	6 M c	7 F c	8 F c	
			9 F 9.74	10 F 9.88	11 F 9.36	12 F 10.35	13 s	0			
7594D26	8.25	8.22	1 M 8.24	2 M 8.95	3 M c	4 M c	5 M c	6 M c	7 M c	8 M 8.35	
			9 M 7.46	10 F 8.41	11 F 8.16	12 F 8.65	13 F 7.66				
7596D27	10.08	9.66	1 M c	2 M c	3 M 10.50	4 M 10.11	5 M 9.98	6 M c	7 M c	8 M c	
			9 M 9.75	10 M c	11 F 10.18	12 F 9.86	13 F 8.79	14 F 9.80			
7510D28	10.35	9.56	1 M 11.07	2 M c	3 M 9.98	4 M 10.12	5 M c	6 M 10.23	7 F c	8 F 9.24	
			9 F 9.55	10 F c	11 F 10.04	12 F 9.40	13 F c	14 F c			
MEAN	10.18	9.76									
S.D.	0.88	0.82									
N	27	27									

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F1 PUPS GROUP: 0.0 PPM															
LACTATION DAY: 7			P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X	
LITTER	MEAN M	F	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
7529A01	16.41	15.37	1 M 16.01	2 M 16.83	3 M 16.54	4 M 16.26	5 F 15.32	6 F 15.81	7 F 14.98	8 F 15.38								
7634A02	13.05	11.88	1 M 12.55	2 M 13.33	3 M 12.99	4 M 13.32	5 F 12.91	6 F 11.72	7 F 11.80	8 F 11.08								
7505A03	17.71	18.51	1 M 18.26	2 M 17.16	3 F 19.15	4 F 17.76	5 F 18.55	6 F 18.60										
7513A04	15.38	14.92	1 M 14.05	2 M 15.27	3 M 15.97	4 M 16.23	5 F 11.82	6 F 16.64	7 F 15.27	8 F 15.96								
7517A05	14.51	14.84	1 M 15.29	2 M 15.96	3 M 12.35	4 M 14.45	5 F 14.92	6 F 14.82	7 F 13.85	8 F 15.78								
7601A06	17.32	15.73	1 M 17.32	2 F 17.09	3 F 15.22	4 F 15.25	5 F 14.80	6 F 16.36	7 F 15.66									
7503A07	14.20	13.13	1 M 15.47	2 M 12.99	3 M 14.46	4 M 13.89	5 F 11.64	6 F 14.23	7 F 12.64	8 F 14.02								
7611A08	12.57	15.53	1 M 15.07	2 M 10.48	3 M 13.94	4 M 10.78	5 F 17.01	6 F 16.26	7 F 13.58	8 F 15.25								
7605A09	15.39	14.52	1 M 15.46	2 M 14.93	3 M 15.69	4 M 15.48	5 F 15.06	6 F 15.63	7 F 13.65	8 F 13.73								
7593A10	16.25	14.47	1 M 15.98	2 M 16.78	3 M 16.54	4 M 15.68	5 F 14.12	6 F 15.07	7 F 14.63	8 F 14.05								
7512A11	16.33	16.05	1 M 15.50	2 M 18.10	3 M 14.20	4 M 17.50	5 F 15.30	6 F 16.30	7 F 17.10	8 F 15.50								
7638A12	16.96	17.20	1 M 17.30	2 M 17.70	3 M 17.52	4 M 15.32	5 F 17.01	6 F 17.15	7 F 16.51	8 F 18.12								
7628A13	17.78	16.57	1 M 17.49	2 M 18.26	3 M 18.25	4 M 17.13	5 F 16.17	6 F 16.34	7 F 16.66	8 F 17.11								
7639A14	14.95	14.73	1 M 16.24	2 M 16.21	3 M 13.32	4 M 14.24	5 M 15.32	6 M 14.36	7 F 15.62	8 F 13.84								
7618A15	15.23	14.41	1 M 15.50	2 M 14.19	3 M 15.70	4 M 15.45	5 M 15.30	6 F 15.03	7 F 13.51	8 F 14.70								
7555A16	20.25	19.58	1 M 20.87	2 M 19.63	3 F 20.16	4 F 20.05	5 F 18.53											
7609A17	17.78	16.25	1 M 17.52	2 M 16.92	3 M 17.94	4 M 18.42	5 M 18.10	6 F 16.50	7 F 16.31	8 F 15.95								
7643A18	16.57	16.78	1 M 15.25	2 M 15.57	3 M 18.41	4 M 17.06	5 F 18.16	6 F 17.20	7 F 17.65	8 F 14.10								
7635A19	16.57	15.35	1 M 16.00	2 M 18.10	3 M 15.90	4 M 16.30	5 F 16.40	6 F 13.50	7 F 15.90	8 F 15.60								
7629A20	16.63	16.67	1 M 15.80	2 M 16.70	3 M 16.30	4 M 17.70	5 F 16.40	6 F 17.40	7 F 16.30	8 F 16.60								
7620A21	18.26	17.28	1 M 18.62	2 M 18.63	3 M 17.11	4 M 18.68	5 F 18.25	6 F 14.97	7 F 18.21	8 F 17.70								
7511A22	17.32	17.24	1 M 17.35	2 M 16.30	3 M 18.12	4 M 17.52	5 F 16.89	6 F 17.94	7 F 16.54	8 F 17.59								
7619A23	18.50	17.30	1 M 18.00	2 M 18.70	3 M 17.80	4 M 19.50	5 F 17.70	6 F 17.00	7 F 17.10	8 F 17.40								
7522A24	15.95	15.22	1 M 17.00	2 M 16.00	3 M 15.30	4 M 15.50	5 F 15.00	6 F 17.40	7 F 15.10	8 F 13.40								
7563A25	14.65	15.54	1 M 15.08	2 M 15.82	3 M 13.84	4 M 13.88	5 F 15.17	6 F 15.93	7 F 15.47	8 F 15.60								
7586A26	17.67	16.08	1 M 17.61	2 M 17.95	3 M 16.53	4 M 18.57	5 F 15.19	6 F 16.93	7 F 16.25	8 F 15.93								
7531A27	19.00	19.05	1 M 18.72	2 M 19.45	3 M 20.16	4 M 17.68	5 F 19.91	6 F 18.28	7 F 18.07	8 F 19.93								
7598A28	14.67	13.57	1 M 15.60	2 M 14.40	3 M 14.70	4 M 14.00	5 F 13.40	6 F 12.40	7 F 14.50	8 F 14.00								
MEAN	16.35	15.85																
S.D.	1.77	1.72																
N	28	28																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER

F1 PUPS GROUP: 300.0 PPM

LACTATION DAY: 7

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X
			WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT	
7621B01	16.50	15.00	1 M	16.51	2 M	16.34	3 M	16.69	4 M	16.47	5 F	15.97	6 F	14.24	7 F	15.84	8 F	13.95
7509B02	17.92	16.94	1 M	17.50	2 M	17.42	3 M	17.88	4 M	18.06	5 M	18.73	6 F	17.11	7 F	16.05	8 F	17.67
7532B03	15.08	14.44	1 M	16.71	2 M	14.16	3 M	14.21	4 M	15.26	5 F	16.68	6 F	13.94	7 F	12.98	8 F	14.17
7508B04	15.86	15.80	1 M	14.84	2 M	17.00	3 M	15.80	4 M	15.81	5 F	16.02	6 F	17.35	7 F	15.93	8 F	13.90
7538B05	16.77	16.57	1 M	17.40	2 M	16.30	3 M	16.30	4 M	17.10	5 F	16.00	6 F	17.10	7 F	16.80	8 F	16.40
7579B06	15.03	14.95	1 M	14.29	2 M	15.56	3 M	15.29	4 M	14.99	5 F	14.45	6 F	15.05	7 F	15.44	8 F	14.85
7537B07	17.65	16.32	1 M	18.08	2 M	17.48	3 M	18.35	4 M	17.99	5 M	16.82	6 M	17.20	7 F	15.09	8 F	17.54
7574B08	17.53	15.49	1 M	17.17	2 M	17.18	3 M	19.39	4 M	17.02	5 M	16.87	6 F	15.77	7 F	14.96	8 F	15.74
7627B09	18.29	15.72	1 M	17.07	2 M	18.56	3 M	19.00	4 M	18.52	5 F	17.45	6 F	16.33	7 F	12.19	8 F	16.92
7561B10	17.28	16.52	1 M	17.44	2 M	17.41	3 M	16.63	4 M	17.65	5 F	17.72	6 F	16.79	7 F	15.65	8 F	15.93
7608B11	15.58	14.65	1 M	14.80	2 M	16.10	3 M	16.00	4 M	15.40	5 F	15.30	6 F	15.70	7 F	14.90	8 F	12.70
7564B12	17.29	16.86	1 M	17.29	2 M	17.71	3 M	17.94	4 M	16.21	5 F	16.25	6 F	17.17	7 F	15.82	8 F	18.21
7630B13	15.40	15.46	1 M	14.73	2 M	15.91	3 M	15.64	4 M	15.31	5 F	15.53	6 F	14.70	7 F	15.56	8 F	16.05
7518B14	16.29	15.67	1 M	16.64	2 M	16.20	3 M	15.89	4 M	16.43	5 F	15.15	6 F	15.75	7 F	15.55	8 F	16.22
7585B15	16.05	14.45	1 M	15.00	2 M	15.40	3 M	16.30	4 M	17.50	5 F	17.10	6 F	15.80	7 F	10.80	8 F	14.10
7600B17	18.61	17.69	1 M	18.50	2 M	18.51	3 M	18.81	4 F	17.69	5 F	18.21	6 F	18.23	7 F	18.81	8 F	15.49
7603B18	16.77	17.08	1 M	16.50	2 M	17.50	3 M	16.80	4 M	16.30	5 F	17.20	6 F	17.00	7 F	16.40	8 F	17.70
7520B19	18.35	16.17	1 M	17.50	2 M	18.30	3 M	18.40	4 M	19.20	5 F	17.10	6 F	13.70	7 F	16.60	8 F	17.30
7541B20	16.62	15.54	1 M	15.57	2 M	16.00	3 M	16.87	4 M	18.02	5 F	15.24	6 F	16.38	7 F	14.72	8 F	15.84
7623B21	16.83	16.15	1 M	16.83	2 M	17.37	3 M	16.28	4 F	16.60	5 F	15.84	6 F	15.99	7 F	15.93	8 F	16.40
7631B22	17.83	17.30	1 M	18.10	2 M	18.10	3 M	18.10	4 M	17.00	5 F	17.80	6 F	16.90	7 F	17.00	8 F	17.50
7578B23	16.35	16.88	1 M	16.47	2 M	14.37	3 M	17.19	4 M	17.39	5 F	18.94	6 F	15.64	7 F	16.35	8 F	16.60
7527B24	18.36	17.80	1 M	18.25	2 M	18.77	3 M	17.56	4 M	18.87	5 F	18.75	6 F	17.36	7 F	18.07	8 F	17.03
7524B25	19.30	19.53	1 M	19.30	2 F	20.70	3 F	18.60	4 F	19.20	5 F	19.60						
7552B26	17.68	16.60	1 M	17.59	2 M	18.45	3 M	17.55	4 M	17.11	5 F	16.16	6 F	16.32	7 F	16.54	8 F	17.36
7590B27	17.24	15.67	1 M	17.10	2 M	17.35	3 M	17.27	4 F	16.10	5 F	16.97	6 F	17.14	7 F	14.55	8 F	13.61
7566B28	16.94	17.32	1 M	18.03	2 M	16.47	3 M	16.25	4 M	17.01	5 F	18.07	6 F	16.43	7 F	17.44	8 F	17.35
MEAN	17.01	16.24																
S.D.	1.11	1.16																
N	27	27																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 7

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7550C01	17.88	16.83	1 M	18.30	2 M	18.10	3 M	18.00	4 M	17.10	5 F	16.20	6 F	16.40	7 F	17.20	8 F	17.50
7588C02	16.70	15.83	1 M	16.50	2 M	17.10	3 M	16.60	4 M	16.60	5 F	16.20	6 F	15.50	7 F	15.30	8 F	16.30
7556C03	16.70	15.83	1 M	15.60	2 M	16.30	3 M	16.50	4 M	18.40	5 F	15.40	6 F	16.00	7 F	16.60	8 F	15.30
7633C04	13.57	13.62	1 M	13.66	2 M	14.18	3 M	13.75	4 M	12.67	5 F	13.70	6 F	13.88	7 F	12.35	8 F	14.57
7533C05	17.82	16.80	1 M	18.10	2 M	16.80	3 M	18.50	4 M	17.90	5 F	17.20	6 F	15.50	7 F	17.00	8 F	17.50
7504C06	16.00	15.47	1 M	17.50	2 M	16.10	3 M	14.80	4 M	15.60	5 F	15.30	6 F	15.00	7 F	16.30	8 F	15.30
7582C07	17.64	17.12	1 M	17.86	2 M	17.11	3 M	18.43	4 M	17.16	5 F	16.74	6 F	17.54	7 F	17.92	8 F	16.28
7624C08	16.82	16.51	1 M	16.99	2 M	16.64	3 M	17.17	4 M	16.48	5 F	15.85	6 F	16.08	7 F	17.62	8 F	16.48
7542C09	17.26	16.80	1 M	17.30	2 M	17.20	3 M	18.70	4 M	16.20	5 M	16.90	6 F	17.10	7 F	17.20	8 F	16.10
7543C10	20.50	20.60	1 M	20.40	2 M	20.60	3 F	20.70	4 F	20.50								
7572C11	18.33	17.42	1 M	18.00	2 M	17.70	3 M	19.70	4 M	17.90	5 F	17.80	6 F	18.30	7 F	16.40	8 F	17.20
7573C12	18.97	17.17	1 M	18.31	2 M	19.08	3 M	19.51	4 M	19.19	5 M	18.76	6 F	17.51	7 F	18.14	8 F	15.86
7616C13	13.95	14.03	1 M	15.58	2 M	12.91	3 M	15.39	4 M	11.91	5 F	13.22	6 F	15.20	7 F	13.62	8 F	14.06
7540C14	17.60	17.40	1 M	17.80	2 M	18.30	3 M	16.80	4 M	17.50	5 F	16.90	6 F	19.30	7 F	16.00	8 F	17.40
7617C15	15.88	15.20	1 M	14.78	2 M	15.89	3 M	16.73	4 M	16.12	5 F	15.09	6 F	15.83	7 F	14.37	8 F	15.53
7565C16	17.78	15.98	1 M	16.60	2 M	19.10	3 M	17.50	4 M	17.90	5 F	15.30	6 F	16.50	7 F	16.00	8 F	16.10
7516C17	17.45	16.52	1 M	16.78	2 M	17.99	3 M	17.57	4 F	14.25	5 F	17.45	6 F	17.59	7 F	15.83	8 F	17.50
7625C18	19.43	18.70	1 M	19.60	2 M	17.00	3 M	21.70	4 F	20.90	5 F	19.40	6 F	18.20	7 F	18.80	8 F	16.20
7626C19	17.40	17.22	1 M	18.40	2 M	15.80	3 M	18.80	4 M	16.60	5 F	17.00	6 F	16.00	7 F	16.90	8 F	19.00
7559C20	16.10	15.50	1 M	16.09	2 M	16.92	3 M	16.01	4 M	16.37	5 M	15.10	6 F	16.12	7 F	15.06	8 F	15.32
7546C21	17.25	16.42	1 M	18.10	2 M	16.30	3 M	16.60	4 M	18.00	5 F	16.50	6 F	15.70	7 F	16.50	8 F	17.00
7571C22	16.69	16.22	1 M	16.93	2 M	16.18	3 M	17.26	4 M	16.37	5 F	16.85	6 F	16.80	7 F	15.20	8 F	16.05
7606C23	16.84	16.63	1 M	17.70	2 M	16.00	3 M	17.50	4 M	16.30	5 M	16.70	6 F	17.70	7 F	17.20	8 F	15.00
7498C24	15.57	16.34	1 M	16.87	2 M	15.24	3 M	14.18	4 M	15.97	5 F	16.23	6 F	15.64	7 F	15.88	8 F	17.60
7615C25	18.88	18.50	1 M	19.10	2 M	18.90	3 M	18.20	4 M	19.30	5 F	18.50	6 F	17.10	7 F	19.40	8 F	19.00
7612C26	14.10	13.90	1 M	15.20	2 M	11.90	3 M	14.00	4 M	15.30	5 F	14.60	6 F	13.80	7 F	13.70	8 F	13.50
7589C27	13.17	12.35	1 M	12.70	2 M	13.70	3 M	13.80	4 M	12.50	5 F	14.00	6 F	13.10	7 F	11.60	8 F	10.70
7502C28	16.55	16.17	1 M	15.80	2 M	17.50	3 M	17.20	4 M	15.70	5 F	16.30	6 F	16.10	7 F	16.40	8 F	15.90
MEAN	16.89	16.32																
S.D.	1.72	1.63																
N	28	28																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 7

LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7495D01	15.90	15.68	1 M 15.30	2 M 14.80	3 M 16.50	4 M 17.00	5 F 16.20	6 F 15.70	7 F 16.70	8 F 14.10					
7539D02	18.72	18.30	1 M 19.40	2 M 20.00	3 M 19.00	4 M 16.50	5 F 19.10	6 F 17.80	7 F 18.40	8 F 17.90					
7519D03	15.42	14.50	1 M 15.27	2 M 15.52	3 M 15.38	4 M 15.52	5 F 14.27	6 F 14.78	7 F 14.77	8 F 14.17					
7515D04	15.93	15.25	1 M 15.82	2 M 15.27	3 M 16.28	4 M 16.33	5 F 15.84	6 F 15.22	7 F 14.62	8 F 15.30					
7568D05	16.36	15.92	1 M 15.89	2 M 16.53	3 M 16.13	4 M 16.89	5 F 16.37	6 F 15.54	7 F 16.18	8 F 15.57					
7636D06	16.72	16.27	1 M 16.74	2 M 16.73	3 M 16.73	4 M 16.70	5 F 15.36	6 F 16.52	7 F 17.00	8 F 16.20					
7545D07	17.16	15.59	1 M 17.91	2 M 17.63	3 M 18.09	4 M 17.09	5 M 16.72	6 M 15.50	7 F 15.96	8 F 15.21					
7575D08	16.15	15.85	1 M 16.00	2 M 16.70	3 M 15.10	4 M 16.80	5 F 15.60	6 F 16.00	7 F 16.00	8 F 15.80					
7584D09	15.22	15.40	1 M 15.20	2 M 14.20	3 M 16.10	4 M 15.40	5 F 17.00	6 F 14.10	7 F 15.30	8 F 15.20					
7610D10	17.19	16.92	1 M 16.27	2 M 18.22	3 M 17.35	4 M 16.91	5 F 14.89	6 F 19.06	7 F 16.00	8 F 17.74					
7536D11	15.65	15.05	1 M 16.00	2 M 15.80	3 M 15.60	4 M 15.20	5 F 15.70	6 F 14.10	7 F 14.80	8 F 15.60					
7591D12	15.89	14.53	1 M 16.41	2 M 16.00	3 M 15.25	4 F 15.33	5 F 14.79	6 F 13.46							
7554D13	17.23	16.32	1 M 17.70	2 M 17.40	3 M 15.80	4 M 18.00	5 F 14.00	6 F 16.50	7 F 16.80	8 F 18.00					
7557D14	16.87	16.24	1 M 17.70	2 M 16.00	3 M 16.90	4 F 17.70	5 F 16.40	6 F 16.00	7 F 15.80	8 F 15.30					
7548D15	17.67	16.58	1 M 17.40	2 M 17.30	3 M 18.60	4 M 17.40	5 F 16.20	6 F 16.90	7 F 16.70	8 F 16.50					
7569D16	16.26	15.98	1 M 14.98	2 M 17.12	3 M 17.79	4 M 15.15	5 F 15.23	6 F 16.87	7 F 15.01	8 F 16.80					
7632D18	16.47	16.72	1 M 15.80	2 M 17.30	3 M 16.50	4 M 16.30	5 F 17.30	6 F 17.30	7 F 16.40	8 F 15.90					
7528D19	17.51	16.64	1 M 16.60	2 M 18.07	3 M 17.65	4 M 17.73	5 F 17.01	6 F 16.76	7 F 16.38	8 F 16.43					
7547D20	17.32	16.90	1 M 17.30	2 M 16.50	3 M 18.10	4 M 17.40	5 F 17.10	6 F 17.60	7 F 16.40	8 F 16.50					
7549D21	16.22	14.69	1 M 16.43	2 M 17.20	3 M 15.66	4 M 15.58	5 F 14.94	6 F 15.91	7 F 14.15	8 F 13.77					
7583D22	17.82	17.63	1 M 17.87	2 M 18.03	3 M 17.60	4 M 17.76	5 F 17.72	6 F 17.48	7 F 17.52	8 F 17.81					
7523D23	18.02	17.66	1 M 17.25	2 M 18.68	3 M 18.04	4 M 18.11	5 F 17.02	6 F 17.47	7 F 17.24	8 F 18.93					
7544D24	15.78	14.90	1 M 15.10	2 M 15.50	3 M 16.20	4 M 16.30	5 F 13.90	6 F 15.50	7 F 14.30	8 F 15.90					
7637D25	16.15	15.79	1 M 15.18	2 M 15.91	3 M 16.24	4 M 17.26	5 F 15.27	6 F 15.77	7 F 15.65	8 F 16.48					
7594D26	13.47	13.19	1 M 14.42	2 M 13.67	3 M 13.47	4 M 12.33	5 F 13.14	6 F 14.07	7 F 13.60	8 F 11.96					
7596D27	16.51	15.62	1 M 16.41	2 M 16.63	3 M 16.53	4 M 16.48	5 F 15.82	6 F 16.51	7 F 15.33	8 F 14.84					
7510D28	17.62	16.70	1 M 18.80	2 M 16.80	3 M 17.90	4 M 17.00	5 F 16.60	6 F 16.60	7 F 17.30	8 F 16.30					
MEAN	16.56	15.96													
S.D.	1.07	1.11													
N	27	27													

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER

F1 PUPS GROUP: 0.0 PPM

LACTATION DAY: 14

MEAN			P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E
LITTER	M	F	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT
7529A01	34.01	32.22	1 M 34.12	2 M 34.63	3 M 33.35	4 M 33.95	5 F 32.35	6 F 33.60	7 F 30.55	8 F 32.38						
7634A02	26.91	24.21	1 M 28.42	2 M 26.19	3 M 27.44	4 M 25.57	5 F 24.65	6 F 24.64	7 F 23.39	8 F 24.16						
7505A03	34.16	34.55	1 M 33.25	2 M 35.07	3 F 35.90	4 F 34.65	5 F 32.38	6 F 35.27								
7513A04	32.69	31.65	1 M 32.83	2 M 30.66	3 M 32.96	4 M 34.31	5 F 31.32	6 F 33.72	7 F 28.80	8 F 32.76						
7517A05	35.54	35.30	1 M 36.09	2 M 34.71	3 M 33.30	4 M 38.07	5 F 36.55	6 F 35.00	7 F 33.99	8 F 35.65						
7601A06	33.44	31.41	1 M 33.44	2 F 31.71	3 F 33.44	4 F 33.32	5 F 29.69	6 F 30.26	7 F 30.06							
7503A07	31.22	27.91	1 M 30.54	2 M 29.92	3 M 33.31	4 M 31.12	5 F 33.42	6 F 33.07	7 F 29.78	8 F 15.37						
7611A08	29.73	32.90	1 M 33.61	2 M 27.21	3 M 30.86	4 M 27.25	5 F 36.24	6 F 30.54	7 F 33.54	8 F 31.27						
7605A09	30.45	29.52	1 M 30.42	2 M 30.27	3 M 31.03	4 M 30.09	5 F 28.31	6 F 29.88	7 F 29.36	8 F 30.54						
7593A10	33.76	30.93	1 M 33.40	2 M 33.02	3 M 34.32	4 M 34.30	5 F 32.26	6 F 30.66	7 F 29.79	8 F 31.03						
7512A11	36.29	35.44	1 M 35.88	2 M 33.71	3 M 38.46	4 M 37.11	5 F 35.88	6 F 35.76	7 F 34.09	8 F 36.04						
7638A12	37.51	37.31	1 M 37.56	2 M 36.99	3 M 39.38	4 M 36.09	5 F 36.86	6 F 38.17	7 F 38.30	8 F 35.92						
7628A13	37.34	35.76	1 M 37.01	2 M 38.21	3 M 36.03	4 M 38.11	5 F 34.83	6 F 35.09	7 F 36.78	8 F 36.35						
7639A14	34.56	32.91	1 M 32.65	2 M 33.91	3 M 36.29	4 M 36.60	5 M 33.02	6 M 34.87	7 F 34.18	8 F 31.65						
7618A15	31.97	31.15	1 M 31.88	2 M 32.00	3 M 31.17	4 M 32.30	5 M 32.52	6 F 31.56	7 F 30.17	8 F 31.71						
7555A16	41.56	40.07	1 M 41.78	2 M 41.34	3 F 38.34	4 F 41.21	5 F 40.65									
7609A17	35.66	33.80	1 M 35.76	2 M 37.07	3 M 36.15	4 M 34.37	5 M 34.96	6 F 33.99	7 F 34.73	8 F 32.69						
7643A18	36.94	37.29	1 M 34.50	2 M 38.59	3 M 39.67	4 M 35.01	5 F 33.20	6 F 37.78	7 F 39.49	8 F 38.70						
7635A19	35.61	34.19	1 M 35.84	2 M 37.14	3 M 34.80	4 M 34.65	5 F 33.31	6 F 35.67	7 F 30.88	8 F 36.92						
7629A20	33.45	32.76	1 M 31.71	2 M 34.28	3 M 34.93	4 M 32.90	5 F 30.81	6 F 35.14	7 F 33.24	8 F 31.84						
7620A21	38.39	37.34	1 M 39.99	2 M 38.33	3 M 37.17	4 M 38.05	5 F 34.12	6 F 37.63	7 F 40.15	8 F 37.45						
7511A22	37.94	36.75	1 M 38.46	2 M 37.21	3 M 37.12	4 M 38.96	5 F 33.75	6 F 36.65	7 F 38.93	8 F 37.65						
7619A23	37.13	35.62	1 M 39.08	2 M 36.61	3 M 36.88	4 M 35.95	5 F 35.92	6 F 35.55	7 F 35.42	8 F 35.61						
7522A24	31.62	30.13	1 M 32.04	2 M 30.90	3 M 32.07	4 M 31.45	5 F 27.10	6 F 32.44	7 F 29.71	8 F 31.29						
7563A25	32.73	34.68	1 M 32.33	2 M 31.70	3 M 33.95	4 M 32.92	5 F 34.30	6 F 34.43	7 F 35.54	8 F 34.46						
7586A26	33.76	31.57	1 M 33.77	2 M 34.89	3 M 33.97	4 M 32.40	5 F 31.99	6 F 30.24	7 F 31.81	8 F 32.26						
7531A27	39.38	39.02	1 M 36.67	2 M 40.28	3 M 39.78	4 M 40.78	5 F 40.11	6 F 37.27	7 F 41.32	8 F 37.36						
7598A28	32.46	30.88	1 M 32.38	2 M 34.07	3 M 32.10	4 M 31.30	5 F 32.84	6 F 30.55	7 F 31.11	8 F 29.01						
MEAN	34.51	33.47														
S.D.	3.18	3.47														
N	28	28														

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER			F1 PUPS GROUP: 300.0 PPM															
LACTATION DAY: 14			P S		P S		P S		P S		P S		P S		P S		P S	
MEAN			U E		U E		U E		U E		U E		U E		U E		U E	
LITTER			P X		P X		P X		P X		P X		P X		P X		P X	
M F			WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT	
7621B01	36.67	33.61	1 M	36.43	2 M	35.69	3 M	36.80	4 M	37.77	5 F	34.69	6 F	33.48	7 F	31.63	8 F	34.63
7509B02	35.43	34.04	1 M	36.24	2 M	35.71	3 M	35.69	4 M	34.38	5 M	35.12	6 F	34.70	7 F	32.62	8 F	34.81
7532B03	31.57	30.11	1 M	34.68	2 M	33.02	3 M	29.81	4 M	28.78	5 F	28.06	6 F	28.06	7 F	30.33	8 F	34.01
7508B04	33.35	33.51	1 M	34.83	2 M	31.16	3 M	31.92	4 M	35.49	5 F	34.65	6 F	33.71	7 F	35.73	8 F	29.96
7538B05	34.31	33.53	1 M	34.86	2 M	33.83	3 M	34.42	4 M	34.12	5 F	34.15	6 F	32.69	7 F	32.84	8 F	34.45
7579B06	36.22	35.41	1 M	37.06	2 M	35.57	3 M	36.11	4 M	36.14	5 F	35.76	6 F	34.50	7 F	33.96	8 F	37.44
7537B07	33.40	31.15	1 M	32.55	2 M	33.78	3 M	34.10	4 M	33.34	5 M	32.98	6 M	33.66	7 F	33.08	8 F	29.21
7574B08	36.28	33.38	1 M	35.61	2 M	38.13	3 M	35.71	4 M	35.58	5 M	36.35	6 F	32.35	7 F	33.92	8 F	33.87
7627B09	36.62	32.99	1 M	35.65	2 M	37.67	3 M	35.06	4 M	38.10	5 F	28.93	6 F	33.40	7 F	34.89	8 F	34.74
7561B10	35.95	33.74	1 M	34.94	2 M	36.54	3 M	36.53	4 M	35.78	5 F	33.93	6 F	32.58	7 F	35.90	8 F	32.55
7608B11	30.40	28.86	1 M	29.73	2 M	29.63	3 M	31.51	4 M	30.72	5 F	29.56	6 F	25.99	7 F	30.04	8 F	29.86
7564B12	35.99	34.00	1 M	36.17	2 M	34.64	3 M	37.10	4 M	36.07	5 F	35.78	6 F	32.54	7 F	34.46	8 F	33.23
7630B13	32.90	32.47	1 M	33.50	2 M	33.43	3 M	32.82	4 M	31.85	5 F	32.11	6 F	31.96	7 F	31.93	8 F	33.89
7518B14	32.60	31.16	1 M	31.78	2 M	32.90	3 M	33.37	4 M	32.35	5 F	32.20	6 F	30.53	7 F	30.80	8 F	31.11
7585B15	35.62	32.18	1 M	35.00	2 M	35.08	3 M	35.91	4 M	36.47	5 F	25.60	6 F	33.22	7 F	35.94	8 F	33.97
7600B17	36.70	35.83	1 M	38.28	2 M	35.71	3 M	36.12	4 F	36.27	5 F	35.73	6 F	35.50	7 F	37.60	8 F	34.05
7603B18	35.52	35.32	1 M	35.94	2 M	35.00	3 M	36.17	4 M	34.98	5 F	35.48	6 F	35.15	7 F	35.76	8 F	34.89
7520B19	37.25	33.73	1 M	37.92	2 M	38.41	3 M	35.79	4 M	36.89	5 F	34.19	6 F	35.53	7 F	35.24	8 F	29.98
7541B20	34.30	32.77	1 M	33.36	2 M	36.83	3 M	34.52	4 M	32.47	5 F	31.10	6 F	33.84	7 F	32.69	8 F	33.44
7623B21	33.59	32.11	1 M	33.48	2 M	33.22	3 M	34.07	4 F	31.64	5 F	31.63	6 F	31.81	7 F	32.33	8 F	33.13
7631B22	36.08	34.57	1 M	35.72	2 M	34.67	3 M	36.93	4 M	36.99	5 F	34.93	6 F	34.52	7 F	34.81	8 F	34.02
7578B23	36.00	35.76	1 M	37.30	2 M	35.60	3 M	36.78	4 M	34.33	5 F	36.96	6 F	33.07	7 F	38.81	8 F	34.18
7527B24	37.38	36.58	1 M	38.37	2 M	38.08	3 M	36.63	4 M	36.45	5 F	36.31	6 F	37.04	7 F	37.29	8 F	35.68
7524B25	37.80	38.17	1 M	37.80	2 F	38.26	3 F	38.37	4 F	37.76	5 F	38.28						
7552B26	37.86	34.60	1 M	37.79	2 M	38.55	3 M	38.07	4 M	37.05	5 F	35.30	6 F	35.02	7 F	35.93	8 F	32.13
7590B27	37.11	34.01	1 M	38.05	2 M	36.84	3 M	36.43	4 F	31.85	5 F	29.68	6 F	36.82	7 F	35.97	8 F	35.71
7566B28	36.66	36.13	1 M	36.24	2 M	36.42	3 M	37.33	4 M	36.66	5 F	36.10	6 F	35.01	7 F	37.24	8 F	36.19
MEAN	35.32	33.69																
S.D.	1.95	2.03																
N	27	27																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 14

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7550C01	34.05	32.57	1 M	34.28	2 M	33.80	3 M	33.60	4 M	34.53	5 F	31.71	6 F	33.13	7 F	32.12	8 F	33.33
7588C02	33.60	32.08	1 M	33.88	2 M	33.47	3 M	33.51	4 M	33.55	5 F	31.68	6 F	32.92	7 F	32.65	8 F	31.06
7556C03	35.10	33.71	1 M	33.68	2 M	36.89	3 M	35.14	4 M	34.68	5 F	34.51	6 F	33.81	7 F	33.54	8 F	32.98
7633C04	28.30	27.63	1 M	29.60	2 M	26.71	3 M	28.83	4 M	28.05	5 F	27.86	6 F	25.58	7 F	29.32	8 F	27.75
7533C05	36.55	35.30	1 M	37.34	2 M	35.65	3 M	35.26	4 M	37.93	5 F	36.09	6 F	35.51	7 F	34.51	8 F	35.09
7504C06	32.16	30.83	1 M	34.09	2 M	32.91	3 M	31.41	4 M	30.25	5 F	30.39	6 F	30.49	7 F	30.11	8 F	32.35
7582C07	35.91	34.66	1 M	34.86	2 M	34.90	3 M	36.94	4 M	36.95	5 F	35.49	6 F	33.99	7 F	36.00	8 F	33.15
7624C08	36.04	35.39	1 M	36.10	2 M	35.07	3 M	36.27	4 M	36.73	5 F	34.55	6 F	35.85	7 F	35.22	8 F	35.94
7542C09	34.98	33.95	1 M	36.35	2 M	34.72	3 M	34.79	4 M	36.87	5 M	32.16	6 F	34.54	7 F	34.58	8 F	32.73
7543C10	40.80	41.60	1 M	42.90	2 M	38.70	3 F	42.40	4 F	40.80								
7572C11	40.25	38.74	1 M	41.22	2 M	39.71	3 M	39.27	4 M	40.79	5 F	38.93	6 F	39.91	7 F	37.32	8 F	38.81
7573C12	38.18	35.87	1 M	36.90	2 M	39.50	3 M	37.90	4 M	38.80	5 M	37.80	6 F	36.80	7 F	36.90	8 F	33.90
7616C13	30.93	30.20	1 M	32.34	2 M	29.15	3 M	32.64	4 M	29.59	5 F	30.19	6 F	29.09	7 F	30.10	8 F	31.43
7540C14	37.45	36.87	1 M	36.96	2 M	36.89	3 M	37.56	4 M	38.39	5 F	39.00	6 F	36.85	7 F	36.64	8 F	35.01
7617C15	33.61	33.15	1 M	34.73	2 M	33.83	3 M	31.59	4 M	34.29	5 F	34.24	6 F	33.78	7 F	31.75	8 F	32.84
7565C16	35.52	32.38	1 M	33.82	2 M	35.37	3 M	37.57	4 M	35.34	5 F	33.29	6 F	32.21	7 F	33.03	8 F	31.01
7516C17	35.59	33.44	1 M	35.03	2 M	35.26	3 M	36.47	4 F	30.52	5 F	33.20	6 F	34.08	7 F	34.84	8 F	34.55
7625C18	36.31	36.18	1 M	32.05	2 M	36.67	3 M	40.20	4 F	38.10	5 F	35.43	6 F	38.40	7 F	36.33	8 F	32.64
7626C19	36.30	36.15	1 M	37.70	2 M	36.00	3 M	34.30	4 M	37.20	5 F	35.90	6 F	38.80	7 F	34.60	8 F	35.30
7559C20	33.08	32.23	1 M	33.90	2 M	34.30	3 M	33.40	4 M	32.30	5 M	31.50	6 F	32.70	7 F	31.50	8 F	32.50
7546C21	35.15	34.07	1 M	35.60	2 M	33.00	3 M	36.80	4 M	35.20	5 F	33.10	6 F	34.60	7 F	34.10	8 F	34.50
7571C22	34.78	33.70	1 M	33.98	2 M	34.61	3 M	35.35	4 M	35.17	5 F	31.97	6 F	33.76	7 F	34.52	8 F	34.56
7606C23	33.58	32.87	1 M	33.20	2 M	33.70	3 M	34.90	4 M	31.10	5 M	35.00	6 F	32.80	7 F	31.60	8 F	34.20
7498C24	33.51	34.58	1 M	31.10	2 M	34.57	3 M	34.82	4 M	33.56	5 F	35.29	6 F	32.82	7 F	36.20	8 F	33.99
7615C25	36.30	35.63	1 M	35.60	2 M	36.90	3 M	36.80	4 M	35.90	5 F	36.20	6 F	35.50	7 F	34.60	8 F	36.20
7612C26	32.25	32.25	1 M	33.50	2 M	34.70	3 M	29.90	4 M	30.90	5 F	31.50	6 F	33.90	7 F	32.40	8 F	31.20
7589C27	29.78	27.66	1 M	30.21	2 M	31.13	3 M	29.05	4 M	28.74	5 F	29.20	6 F	28.23	7 F	28.34	8 F	24.86
7502C28	36.97	35.18	1 M	36.20	2 M	37.60	3 M	38.60	4 M	35.50	5 F	35.20	6 F	35.80	7 F	34.20	8 F	35.50
MEAN	34.89	33.89																
S.D.	2.78	2.93																
N	28	28																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 14

LITTER	MEAN		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E	
	M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
7495D01	33.32	33.12	1 M	34.20	2 M	32.80	3 M	33.50	4 M	32.80	5 F	33.10	6 F	31.10	7 F	35.10	8 F	33.20
7539D02	38.00	36.90	1 M	40.20	2 M	35.20	3 M	38.80	4 M	37.80	5 F	37.50	6 F	36.90	7 F	36.30	8 F	36.90
7519D03	28.97	27.72	1 M	28.70	2 M	30.20	3 M	28.69	4 M	28.30	5 F	28.15	6 F	27.53	7 F	27.17	8 F	28.01
7515D04	30.86	29.76	1 M	30.72	2 M	31.01	3 M	30.85	4 M	30.84	5 F	29.57	6 F	30.29	7 F	30.38	8 F	28.81
7568D05	33.10	32.33	1 M	33.09	2 M	32.77	3 M	33.60	4 M	32.96	5 F	32.80	6 F	32.31	7 F	32.84	8 F	31.38
7636D06	34.20	32.78	1 M	34.70	2 M	34.30	3 M	33.50	4 M	34.30	5 F	33.30	6 F	31.10	7 F	33.90	8 F	32.80
7545D07	32.80	31.10	1 M	30.80	2 M	31.40	3 M	33.50	4 M	34.50	5 M	33.90	6 M	32.70	7 F	31.00	8 F	31.20
7575D08	34.35	33.97	1 M	35.20	2 M	35.50	3 M	32.80	4 M	33.90	5 F	33.00	6 F	34.60	7 F	33.30	8 F	35.00
7584D09	33.05	32.57	1 M	32.60	2 M	32.10	3 M	34.20	4 M	33.30	5 F	30.80	6 F	34.60	7 F	31.70	8 F	33.20
7610D10	35.08	34.16	1 M	35.26	2 M	33.60	3 M	34.53	4 M	36.92	5 F	37.24	6 F	33.46	7 F	34.91	8 F	31.02
7536D11	32.07	30.80	1 M	30.90	2 M	31.80	3 M	32.50	4 M	33.10	5 F	30.50	6 F	30.20	7 F	31.10	8 F	31.40
7591D12	30.83	28.63	1 M	30.20	2 M	31.30	3 M	31.00	4 F	29.40	5 F	29.30	6 F	27.20				
7554D13	35.92	34.30	1 M	36.30	2 M	37.10	3 M	37.30	4 M	33.00	5 F	37.10	6 F	35.90	7 F	34.90	8 F	29.30
7557D14	35.47	33.98	1 M	33.90	2 M	36.60	3 M	35.90	4 F	32.40	5 F	36.80	6 F	33.60	7 F	33.00	8 F	34.10
7548D15	35.32	34.20	1 M	35.10	2 M	35.60	3 M	34.70	4 M	35.90	5 F	35.10	6 F	34.70	7 F	33.60	8 F	33.40
7569D16	34.93	33.40	1 M	36.00	2 M	33.10	3 M	33.90	4 M	36.70	5 F	34.00	6 F	33.30	7 F	34.10	8 F	32.20
7632D18	34.16	33.73	1 M	34.42	2 M	34.97	3 M	33.72	4 M	33.54	5 F	32.15	6 F	34.23	7 F	34.49	8 F	34.05
7528D19	36.02	34.63	1 M	35.00	2 M	36.10	3 M	36.10	4 M	36.90	5 F	34.50	6 F	33.50	7 F	36.00	8 F	34.50
7547D20	35.40	35.10	1 M	35.70	2 M	36.07	3 M	34.02	4 M	35.80	5 F	36.06	6 F	36.81	7 F	33.68	8 F	33.85
7549D21	33.35	30.75	1 M	33.20	2 M	33.40	3 M	32.70	4 M	34.10	5 F	30.30	6 F	31.70	7 F	31.10	8 F	29.90
7583D22	35.77	34.68	1 M	35.63	2 M	35.56	3 M	36.09	4 M	35.79	5 F	35.41	6 F	34.65	7 F	34.62	8 F	34.04
7523D23	36.20	35.30	1 M	35.10	2 M	36.60	3 M	36.50	4 M	36.60	5 F	37.80	6 F	33.40	7 F	34.80	8 F	35.20
7544D24	33.68	32.45	1 M	34.45	2 M	32.15	3 M	34.06	4 M	34.05	5 F	34.07	6 F	32.75	7 F	30.52	8 F	32.46
7637D25	32.64	31.80	1 M	34.14	2 M	33.43	3 M	32.54	4 M	30.47	5 F	32.55	6 F	31.14	7 F	31.77	8 F	31.73
7594D26	27.95	27.18	1 M	26.10	2 M	28.60	3 M	28.30	4 M	28.80	5 F	27.00	6 F	28.90	7 F	27.70	8 F	25.10
7596D27	33.72	31.85	1 M	34.30	2 M	33.20	3 M	33.30	4 M	34.10	5 F	30.80	6 F	33.40	7 F	31.40	8 F	31.80
7510D28	36.90	35.15	1 M	36.00	2 M	37.90	3 M	37.90	4 M	35.80	5 F	35.00	6 F	36.30	7 F	34.70	8 F	34.60
MEAN	33.85	32.68																
S.D.	2.31	2.39																
N	27	27																



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 0.0 PPM

LACTATION DAY: 21

LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
7529A01	57.39	52.97	1 M 57.21	2 M 57.55	3 M 56.11	4 M 58.71	5 F 50.02	6 F 54.73	7 F 53.22	8 F 53.92	
7634A02	43.17	39.77	1 M 44.77	2 M 43.98	3 M 41.84	4 M 42.10	5 F 40.35	6 F 38.21	7 F 40.34	8 F 40.17	
7505A03	53.44	55.60	1 M 53.11	2 M 53.77	3 F 53.54	4 F 56.57	5 F 57.16	6 F 55.11			
7513A04	52.89	51.23	1 M 54.36	2 M 56.02	3 M 54.78	4 M 46.42	5 F 51.74	6 F 52.25	7 F 54.28	8 F 46.65	
7517A05	57.81	56.20	1 M 60.85	2 M 56.72	3 M 58.63	4 M 55.02	5 F 55.75	6 F 54.77	7 F 58.89	8 F 55.39	
7601A06	54.53	50.60	1 M 54.53	2 F 54.67	3 F 49.28	4 F 51.77	5 F 48.42	6 F 51.20	7 F 48.25		
7503A07	51.89	50.03	1 M 51.92	2 M 50.51	3 M 55.74	4 M 49.38	5 F D16	6 F 48.27	7 F 49.13	8 F 52.69	
7611A08	48.33	52.11	1 M 43.60	2 M 50.92	3 M 53.13	4 M 45.68	5 F 55.93	6 F 49.86	7 F 53.16	8 F 49.50	
7605A09	52.13	50.28	1 M 50.38	2 M 54.94	3 M 50.17	4 M 53.03	5 F S18	6 F 51.13	7 F 51.01	8 F 48.70	
7593A10	52.40	49.05	1 M 51.30	2 M 52.86	3 M 51.49	4 M 53.96	5 F 50.61	6 F 47.39	7 F 47.38	8 F 50.80	
7512A11	57.82	56.96	1 M 55.15	2 M 56.97	3 M 61.22	4 M 57.94	5 F 56.59	6 F 55.68	7 F 59.90	8 F 55.68	
7638A12	58.34	56.98	1 M 58.99	2 M 63.07	3 M 55.37	4 M 55.93	5 F 54.52	6 F 58.32	7 F 60.42	8 F 54.65	
7628A13	58.52	55.59	1 M 54.47	2 M 59.72	3 M 59.54	4 M 60.33	5 F 54.01	6 F 55.17	7 F 55.96	8 F 57.23	
7639A14	55.25	53.68	1 M 58.07	2 M 58.51	3 M 57.04	4 M 51.66	5 M 53.53	6 M 52.68	7 F 56.04	8 F 51.31	
7618A15	53.86	51.56	1 M 54.51	2 M 52.60	3 M 54.12	4 M 52.64	5 M 55.41	6 F 49.96	7 F 52.69	8 F 52.04	
7555A16	64.11	63.56	1 M 62.26	2 M 65.96	3 F 63.07	4 F 64.81	5 F 62.81				
7609A17	55.86	51.67	1 M 55.21	2 M 54.98	3 M 56.39	4 M 54.74	5 M 57.97	6 F 53.63	7 F 51.58	8 F 49.81	
7643A18	60.88	60.17	1 M 61.10	2 M 65.77	3 M 58.37	4 M 58.28	5 F 61.17	6 F 56.00	7 F 60.71	8 F 62.81	
7635A19	58.09	55.86	1 M 59.82	2 M 59.44	3 M 57.04	4 M 56.04	5 F 55.85	6 F 52.78	7 F 57.53	8 F 57.28	
7629A20	54.81	52.77	1 M 57.54	2 M 52.60	3 M 51.50	4 M 57.58	5 F 51.11	6 F 54.87	7 F 51.84	8 F 53.25	
7620A21	62.88	61.03	1 M 60.48	2 M 62.30	3 M 63.57	4 M 65.16	5 F 66.45	6 F 58.74	7 F 57.76	8 F 61.18	
7511A22	59.65	58.51	1 M 58.56	2 M 57.94	3 M 60.88	4 M 61.21	5 F 60.71	6 F 55.62	7 F 57.67	8 F 60.03	
7619A23	58.39	55.91	1 M 58.33	2 M 61.13	3 M 56.54	4 M 57.54	5 F 55.30	6 F 55.11	7 F 56.48	8 F 56.76	
7522A24	53.01	49.68	1 M 55.77	2 M 50.75	3 M 51.98	4 M 53.54	5 F 45.73	6 F 53.50	7 F 50.57	8 F 48.90	
7563A25	53.09	54.71	1 M 52.48	2 M 53.26	3 M 51.67	4 M 54.96	5 F 52.25	6 F 55.60	7 F 55.50	8 F 55.48	
7586A26	54.68	52.54	1 M 51.12	2 M 55.80	3 M 56.88	4 M 54.94	5 F 52.89	6 F 55.14	7 F 52.18	8 F 49.96	
7531A27	61.85	58.51	1 M 58.50	2 M 62.84	3 M 64.46	4 M 61.61	5 F 60.03	6 F 57.73	7 F 61.17	8 F 55.10	
7598A28	52.82	50.65	1 M 52.11	2 M 53.45	3 M 50.21	4 M 55.51	5 F 51.62	6 F 45.99	7 F 54.81	8 F 50.19	
MEAN	55.64	53.86									
S.D.	4.45	4.63									
N	28	28									

D= DEAD, S= SACRIFICED

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 300.0 PPM

LACTATION DAY: 21

LITTER	MEAN		P S U E P X	WEIGHT	P S U E P X	WEIGHT	P S U E P X	WEIGHT	P S U E P X	WEIGHT	P S U E P X	WEIGHT	P S U E P X	WEIGHT	P S U E P X	WEIGHT
	M	F														
7621B01	57.84	51.42	1 M	58.79	2 M	57.57	3 M	58.66	4 M	56.33	5 F	51.77	6 F	54.51	7 F	51.55
7509B02	56.21	53.75	1 M	56.76	2 M	53.71	3 M	56.91	4 M	58.01	5 M	55.65	6 F	55.43	7 F	55.04
7532B03	52.67	51.14	1 M	56.93	2 M	51.59	3 M	47.54	4 M	54.63	5 F	56.78	6 F	49.27	7 F	49.91
7508B04	52.23	53.76	1 M	56.82	2 M	49.34	3 M	55.09	4 M	47.66	5 F	52.89	6 F	54.86	7 F	57.11
7538B05	55.78	54.65	1 M	56.86	2 M	55.23	3 M	53.35	4 M	57.68	5 F	53.20	6 F	56.37	7 F	56.82
7579B06	57.85	53.95	1 M	60.32	2 M	57.13	3 M	56.19	4 M	57.77	5 F	54.86	6 F	54.79	7 F	55.30
7537B07	52.22	49.65	1 M	52.89	2 M	52.01	3 M	53.09	4 M	50.53	5 M	53.98	6 M	50.84	7 F	53.44
7574B08	59.06	52.46	1 M	58.95	2 M	59.32	3 M	57.65	4 M	58.39	5 M	60.99	6 F	52.94	7 F	53.84
7627B09	57.99	49.90	1 M	57.20	2 M	60.39	3 M	54.82	4 M	59.56	5 F	51.12	6 F	42.04	7 F	52.52
7561B10	59.49	56.52	1 M	57.90	2 M	61.07	3 M	60.63	4 M	58.34	5 F	54.10	6 F	56.14	7 F	60.33
7608B11	50.87	47.45	1 M	52.52	2 M	49.52	3 M	50.60	4 M	50.83	5 F	48.05	6 F	50.49	7 F	41.51
7564B12	57.09	53.34	1 M	57.56	2 M	55.88	3 M	55.45	4 M	59.45	5 F	55.20	6 F	51.86	7 F	57.39
7630B13	52.28	51.49	1 M	49.40	2 M	51.01	3 M	56.37	4 M	52.36	5 F	49.37	6 F	52.07	7 F	53.05
7518B14	52.84	50.44	1 M	53.49	2 M	53.29	3 M	50.80	4 M	53.79	5 F	52.52	6 F	48.27	7 F	49.83
7585B15	56.27	49.98	1 M	54.25	2 M	56.18	3 M	55.32	4 M	59.35	5 F	37.79	6 F	53.94	7 F	56.96
7600B17	59.66	55.69	1 M	59.88	2 M	59.84	3 M	59.27	4 F	57.44	5 F	58.55	6 F	55.52	7 F	53.27
7603B18	58.94	57.96	1 M	57.02	2 M	59.78	3 M	59.39	4 M	59.59	5 F	57.09	6 F	55.75	7 F	59.35
7520B19	59.38	54.12	1 M	55.99	2 M	62.26	3 M	59.90	4 M	59.38	5 F	52.58	6 F	49.84	7 F	55.13
7541B20	54.53	52.12	1 M	54.46	2 M	56.14	3 M	56.41	4 M	51.12	5 F	54.11	6 F	53.94	7 F	50.11
7623B21	54.00	51.92	1 M	54.40	2 M	53.64	3 M	53.97	4 F	51.97	5 F	51.42	6 F	50.36	7 F	51.37
7631B22	61.31	55.47	1 M	63.74	2 M	59.85	3 M	60.26	4 M	61.39	5 F	56.58	6 F	57.05	7 F	52.77
7578B23	56.87	56.27	1 M	57.39	2 M	54.70	3 M	57.74	4 M	57.66	5 F	52.86	6 F	57.00	7 F	62.12
7527B24	58.03	55.58	1 M	57.63	2 M	57.94	3 M	62.51	4 M	54.03	5 F	57.37	6 F	56.55	7 F	56.48
7524B25	61.70	59.96	1 M	61.70	2 F	61.10	3 F	62.20	4 F	58.18	5 F	58.37				
7552B26	60.26	54.99	1 M	58.58	2 M	62.90	3 M	60.80	4 M	58.77	5 F	57.57	6 F	54.31	7 F	55.34
7590B27	58.15	53.49	1 M	56.46	2 M	56.81	3 M	61.19	4 F	51.49	5 F	54.98	6 F	57.43	7 F	56.72
7566B28	59.73	58.22	1 M	60.88	2 M	58.97	3 M	61.27	4 M	57.80	5 F	59.48	6 F	59.54	7 F	57.04
MEAN	56.79	53.55														
S.D.	3.09	2.93														
N	27	27														

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 21

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7550C01	52.26	51.26	1 M	49.98	2 M	54.15	3 M	52.51	4 M	52.40	5 F	51.73	6 F	50.15	7 F	50.41
7588C02	54.87	51.03	1 M	55.02	2 M	54.52	3 M	55.75	4 M	54.18	5 F	51.94	6 F	49.83	7 F	51.83
7556C03	56.06	53.58	1 M	55.35	2 M	56.26	3 M	57.56	4 M	55.08	5 F	53.21	6 F	54.54	7 F	53.45
7633C04	45.88	44.48	1 M	49.35	2 M	47.83	3 M	46.35	4 M	40.00	5 F	44.75	6 F	40.98	7 F	45.60
7533C05	59.54	54.77	1 M	62.01	2 M	60.03	3 M	57.67	4 M	58.45	5 F	52.60	6 F	55.30	7 F	56.01
7504C06	52.74	48.18	1 M	56.15	2 M	53.75	3 M	54.18	4 M	46.88	5 F	48.20	6 F	47.70	7 F	52.20
7582C07	58.02	55.22	1 M	58.74	2 M	56.40	3 M	60.75	4 M	56.20	5 F	51.01	6 F	58.31	7 F	54.69
7624C08	57.53	56.81	1 M	56.14	2 M	57.95	3 M	57.86	4 M	58.15	5 F	55.74	6 F	56.52	7 F	57.71
7542C09	61.10	58.13	1 M	64.20	2 M	62.20	3 M	64.00	4 M	59.50	5 M	55.60	6 F	57.50	7 F	59.90
7543C10	67.00	67.00	1 M	68.60	2 M	65.40	3 F	67.50	4 F	66.50						
7572C11	59.42	57.99	1 M	57.20	2 M	57.54	3 M	59.24	4 M	63.71	5 F	57.12	6 F	55.84	7 F	57.51
7573C12	60.74	54.55	1 M	62.48	2 M	62.70	3 M	60.67	4 M	61.47	5 M	56.36	6 F	50.52	7 F	55.25
7616C13	53.67	51.30	1 M	52.14	2 M	55.58	3 M	56.21	4 M	50.75	5 F	49.24	6 F	52.02	7 F	53.25
7540C14	54.73	54.98	1 M	52.26	2 M	55.80	3 M	53.25	4 M	57.63	5 F	51.96	6 F	53.65	7 F	54.01
7617C15	54.58	53.17	1 M	56.70	2 M	57.20	3 M	50.71	4 M	53.71	5 F	52.38	6 F	53.85	7 F	55.14
7565C16	57.80	51.93	1 M	54.38	2 M	58.66	3 M	60.80	4 M	57.35	5 F	51.41	6 F	50.63	7 F	52.60
7516C17	57.81	53.69	1 M	57.30	2 M	56.11	3 M	60.03	4 F	56.09	5 F	55.83	6 F	55.18	7 F	47.23
7625C18	59.18	56.99	1 M	64.46	2 M	52.00	3 M	61.08	4 F	60.43	5 F	56.41	6 F	60.88	7 F	48.92
7626C19	57.65	55.02	1 M	59.50	2 M	60.50	3 M	56.90	4 M	53.70	5 F	56.80	6 F	54.70	7 F	54.10
7559C20	54.62	51.43	1 M	55.96	2 M	56.45	3 M	51.94	4 M	53.63	5 M	55.11	6 F	51.57	7 F	50.88
7546C21	56.75	54.65	1 M	52.40	2 M	57.10	3 M	61.00	4 M	56.50	5 F	54.80	6 F	53.80	7 F	54.60
7571C22	55.45	53.88	1 M	56.40	2 M	53.90	3 M	57.14	4 M	54.34	5 F	50.06	6 F	55.59	7 F	55.19
7606C23	54.02	52.57	1 M	56.60	2 M	52.50	3 M	54.10	4 M	54.50	5 M	52.40	6 F	54.30	7 F	55.10
7498C24	57.05	57.20	1 M	57.21	2 M	61.16	3 M	56.30	4 M	53.54	5 F	57.73	6 F	57.61	7 F	57.53
7615C25	58.68	57.50	1 M	59.90	2 M	58.20	3 M	58.30	4 M	58.30	5 F	58.00	6 F	58.60	7 F	57.20
7612C26	53.95	52.02	1 M	52.00	2 M	56.30	3 M	49.90	4 M	57.60	5 F	52.00	6 F	51.50	7 F	51.80
7589C27	49.90	45.53	1 M	50.68	2 M	49.92	3 M	47.67	4 M	51.35	5 F	45.82	6 F	42.26	7 F	47.79
7502C28	60.45	57.27	1 M	58.00	2 M	62.50	3 M	61.40	4 M	59.90	5 F	54.10	6 F	59.30	7 F	58.70
MEAN	56.48	54.00														
S.D.	3.97	4.28														
N	28	28														

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER

F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 21

LITTER	MEAN		P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S
	M	F	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E
			P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X
			WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
7495D01	50.60	49.35	1 M	50.00	2 M	50.10	3 M	52.00	4 M	50.30	5 F	51.00	6 F	50.70	7 F	46.50
7539D02	55.18	54.38	1 M	56.40	2 M	50.50	3 M	56.20	4 M	57.60	5 F	54.60	6 F	54.20	7 F	55.00
7519D03	44.35	42.38	1 M	45.12	2 M	45.07	3 M	42.61	4 M	44.60	5 F	42.35	6 F	42.80	7 F	41.66
7515D04	50.70	46.80	1 M	52.82	2 M	49.24	3 M	50.73	4 M	50.02	5 F	45.81	6 F	47.83	7 F	48.25
7568D05	51.13	49.51	1 M	51.14	2 M	51.92	3 M	50.38	4 M	51.09	5 F	48.06	6 F	49.97	7 F	49.81
7636D06	53.25	50.96	1 M	49.70	2 M	54.37	3 M	55.77	4 M	53.16	5 F	49.23	6 F	52.92	7 F	48.57
7545D07	51.06	47.43	1 M	51.57	2 M	48.19	3 M	51.29	4 M	53.28	5 M	48.36	6 M	53.68	7 F	47.78
7575D08	52.75	54.52	1 M	53.30	2 M	53.00	3 M	49.80	4 M	54.90	5 F	51.90	6 F	50.50	7 F	66.70
7584D09	49.52	48.85	1 M	49.90	2 M	49.30	3 M	50.80	4 M	48.10	5 F	46.90	6 F	47.60	7 F	50.30
7610D10	56.63	53.84	1 M	54.43	2 M	59.69	3 M	57.09	4 M	55.31	5 F	51.88	6 F	55.36	7 F	48.38
7536D11	50.28	49.00	1 M	51.40	2 M	51.00	3 M	49.20	4 M	49.50	5 F	48.10	6 F	48.50	7 F	49.70
7591D12	48.03	44.26	1 M	49.78	2 M	48.78	3 M	45.53	4 F	41.57	5 F	45.71	6 F	45.49		
7554D13	56.05	51.90	1 M	58.60	2 M	59.20	3 M	55.00	4 M	51.40	5 F	56.10	6 F	47.30	7 F	52.60
7557D14	53.63	52.22	1 M	54.60	2 M	53.30	3 M	53.00	4 F	55.70	5 F	50.70	6 F	52.60	7 F	52.10
7548D15	55.55	53.53	1 M	56.00	2 M	54.50	3 M	56.60	4 M	55.10	5 F	55.20	6 F	53.70	7 F	53.20
7569D16	54.20	51.75	1 M	55.05	2 M	54.36	3 M	56.37	4 M	51.01	5 F	53.21	6 F	52.99	7 F	50.03
7632D18	50.48	51.41	1 M	46.89	2 M	51.48	3 M	52.10	4 M	51.44	5 F	51.47	6 F	50.96	7 F	52.15
7528D19	56.07	52.29	1 M	55.13	2 M	58.67	3 M	55.20	4 M	55.27	5 F	50.74	6 F	51.58	7 F	53.50
7547D20	53.78	54.14	1 M	54.77	2 M	54.65	3 M	53.61	4 M	52.08	5 F	56.01	6 F	52.15	7 F	55.96
7549D21	52.94	48.34	1 M	53.07	2 M	52.18	3 M	52.87	4 M	53.65	5 F	46.81	6 F	49.19	7 F	49.40
7583D22	55.05	52.25	1 M	54.62	2 M	54.47	3 M	56.96	4 M	54.16	5 F	49.63	6 F	54.67	7 F	52.51
7523D23	56.07	52.89	1 M	56.22	2 M	55.85	3 M	57.29	4 M	54.90	5 F	50.96	6 F	58.50	7 F	50.95
7544D24	53.20	50.36	1 M	52.74	2 M	51.57	3 M	53.94	4 M	54.55	5 F	53.04	6 F	47.20	7 F	49.57
7637D25	52.72	51.19	1 M	54.74	2 M	49.08	3 M	52.07	4 M	54.99	5 F	50.76	6 F	52.40	7 F	50.19
7594D26	44.35	42.11	1 M	45.25	2 M	45.95	3 M	44.30	4 M	41.90	5 F	41.29	6 F	43.63	7 F	39.55
7596D27	54.14	50.16	1 M	52.12	2 M	54.32	3 M	53.32	4 M	56.79	5 F	46.77	6 F	50.59	7 F	53.00
7510D28	56.50	54.60	1 M	57.50	2 M	57.40	3 M	55.60	4 M	55.50	5 F	54.20	6 F	52.00	7 F	54.30
MEAN	52.53	50.39														
S.D.	3.31	3.46														
N	27	27														

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 0.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7529A01	99.49	86.79	1 M	101.58	2 M	101.21	3 M	98.53	4 M	96.62	5 F	81.81	6 F	87.17	7 F	92.34
7634A02	80.63	72.64	1 M	76.33	2 M	82.48	3 M	80.86	4 M	82.83	5 F	73.02	6 F	71.89	7 F	73.69
7505A03	94.23	89.16	1 M	94.21	2 M	94.25	3 F	89.41	4 F	89.08	5 F	91.78	6 F	86.39		
7513A04	88.24	82.15	1 M	90.26	2 M	78.95	3 M	91.47	4 M	92.26	5 F	83.81	6 F	82.94	7 F	85.23
7517A05	92.82	87.12	1 M	87.67	2 M	95.00	3 M	98.93	4 M	89.69	5 F	87.12	6 F	88.01	7 F	89.90
7601A06	90.90	82.85	1 M	90.90	2 F	80.00	3 F	79.20	4 F	81.07	5 F	89.56	6 F	83.34	7 F	83.92
7503A07	90.30	79.91	1 M	86.11	2 M	95.99	3 M	86.61	4 M	92.47	5 F	D16	6 F	85.29	7 F	73.28
7611A08	81.09	82.30	1 M	88.17	2 M	87.14	3 M	74.12	4 M	74.91	5 F	76.01	6 F	86.34	7 F	79.21
7605A09	92.26	86.57	1 M	91.39	2 M	96.25	3 M	90.50	4 M	90.91	5 F	S18	6 F	87.64	7 F	84.58
7593A10	88.62	80.25	1 M	88.29	2 M	90.32	3 M	89.40	4 M	86.48	5 F	81.47	6 F	81.01	7 F	74.71
7512A11	94.86	87.20	1 M	100.31	2 M	94.21	3 M	92.43	4 M	92.49	5 F	87.14	6 F	86.21	7 F	91.93
7638A12	100.43	96.30	1 M	97.50	2 M	101.67	3 M	106.23	4 M	96.34	5 F	91.77	6 F	100.87	7 F	96.54
7628A13	96.50	88.77	1 M	98.88	2 M	99.15	3 M	98.56	4 M	89.40	5 F	90.69	6 F	87.72	7 F	90.61
7639A14	92.87	86.17	1 M	88.55	2 M	99.74	3 M	90.26	4 M	85.12	5 M	100.43	6 M	93.09	7 F	92.11
7618A15	90.59	85.23	1 M	93.65	2 M	85.34	3 M	91.68	4 M	91.80	5 M	90.48	6 F	87.15	7 F	84.42
7555A16	101.13	96.44	1 M	98.18	2 M	104.07	3 F	94.80	4 F	94.74	5 F	99.77				
7609A17	96.36	85.58	1 M	98.50	2 M	95.76	3 M	94.62	4 M	95.94	5 M	96.99	6 F	86.67	7 F	85.43
7643A18	99.43	93.31	1 M	107.48	2 M	96.72	3 M	96.63	4 M	96.90	5 F	100.83	6 F	92.01	7 F	86.34
7635A19	94.64	88.19	1 M	94.76	2 M	93.60	3 M	91.10	4 M	99.11	5 F	88.59	6 F	88.71	7 F	92.83
7629A20	93.76	86.48	1 M	95.42	2 M	96.61	3 M	86.07	4 M	96.94	5 F	D25	6 F	86.55	7 F	88.59
7620A21	104.30	97.42	1 M	96.96	2 M	105.13	3 M	108.48	4 M	106.61	5 F	97.63	6 F	112.23	7 F	89.70
7511A22	99.88	90.95	1 M	99.01	2 M	100.63	3 M	103.35	4 M	96.52	5 F	89.95	6 F	89.50	7 F	93.84
7619A23	98.72	89.91	1 M	98.35	2 M	102.89	3 M	97.86	4 M	95.77	5 F	90.73	6 F	90.90	7 F	88.04
7522A24	91.81	80.90	1 M	94.14	2 M	93.18	3 M	89.67	4 M	90.27	5 F	86.80	6 F	80.02	7 F	82.29
7563A25	91.46	89.82	1 M	86.31	2 M	90.62	3 M	92.68	4 M	96.23	5 F	85.77	6 F	98.03	7 F	86.68
7586A26	94.77	84.97	1 M	96.44	2 M	98.88	3 M	95.96	4 M	87.81	5 F	83.98	6 F	88.20	7 F	86.01
7531A27	103.95	90.42	1 M	105.12	2 M	110.10	3 M	102.15	4 M	98.44	5 F	88.92	6 F	93.14	7 F	84.83
7598A28	91.29	83.92	1 M	91.86	2 M	92.79	3 M	89.26	4 M	91.24	5 F	91.11	6 F	76.48	7 F	87.43
MEAN	94.12	86.85														
S.D.	5.75	5.44														
N	28	28														

D= DEAD, S= SACRIFICED

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 300.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E	
	M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
7621B01	98.80	82.61	1 M	100.79	2 M	100.88	3 M	94.70	4 M	98.83	5 F	81.81	6 F	88.52	7 F	77.22	8 F	82.91
7509B02	95.95	87.35	1 M	101.54	2 M	93.10	3 M	99.88	4 M	89.08	5 M	96.15	6 F	82.89	7 F	89.54	8 F	89.61
7532B03	87.67	78.41	1 M	90.44	2 M	82.13	3 M	92.75	4 M	85.38	5 F	76.63	6 F	76.31	7 F	86.48	8 F	74.21
7508B04	91.05	89.25	1 M	94.33	2 M	88.14	3 M	88.60	4 M	93.12	5 F	88.24	6 F	85.73	7 F	94.53	8 F	88.48
7538B05	94.28	88.22	1 M	93.33	2 M	94.52	3 M	95.13	4 M	94.16	5 F	90.04	6 F	83.68	7 F	86.70	8 F	92.44
7579B06	92.86	84.25	1 M	97.12	2 M	92.86	3 M	90.14	4 M	91.33	5 F	84.38	6 F	82.86	7 F	87.30	8 F	82.44
7537B07	94.24	83.51	1 M	100.18	2 M	89.89	3 M	95.53	4 M	89.25	5 M	95.98	6 M	94.59	7 F	76.65	8 F	90.37
7574B08	103.40	86.16	1 M	101.94	2 M	103.53	3 M	104.99	4 M	104.47	5 M	102.05	6 F	89.58	7 F	82.42	8 F	86.48
7627B09	95.16	79.42	1 M	96.42	2 M	92.42	3 M	97.75	4 M	94.05	5 F	87.25	6 F	81.45	7 F	82.14	8 F	66.86
7561B10	99.54	93.66	1 M	93.63	2 M	105.01	3 M	97.35	4 M	102.17	5 F	87.74	6 F	94.63	7 F	96.18	8 F	96.09
7608B11	91.51	79.22	1 M	89.98	2 M	93.38	3 M	89.31	4 M	93.37	5 F	82.27	6 F	82.80	7 F	81.31	8 F	70.52
7564B12	92.27	83.82	1 M	96.03	2 M	91.36	3 M	88.74	4 M	92.94	5 F	90.90	6 F	76.88	7 F	87.00	8 F	80.52
7630B13	90.91	84.27	1 M	89.51	2 M	88.63	3 M	95.24	4 M	90.26	5 F	85.48	6 F	88.25	7 F	78.67	8 F	84.70
7518B14	90.82	84.88	1 M	93.61	2 M	90.57	3 M	88.07	4 M	91.04	5 F	84.25	6 F	84.77	7 F	87.30	8 F	83.20
7585B15	93.16	80.59	1 M	97.78	2 M	94.50	3 M	89.44	4 M	90.90	5 F	87.52	6 F	84.51	7 F	65.23	8 F	85.11
7600B17	98.96	86.95	1 M	100.26	2 M	100.92	3 M	95.69	4 F	90.12	5 F	89.34	6 F	84.91	7 F	86.17	8 F	84.23
7603B18	98.08	91.10	1 M	99.16	2 M	98.63	3 M	95.46	4 M	99.07	5 F	88.88	6 F	92.48	7 F	88.81	8 F	94.24
7520B19	93.29	84.78	1 M	92.05	2 M	98.13	3 M	95.13	4 M	87.85	5 F	78.66	6 F	93.97	7 F	80.56	8 F	85.94
7541B20	93.34	84.18	1 M	84.44	2 M	93.19	3 M	94.80	4 M	100.93	5 F	83.44	6 F	88.85	7 F	87.05	8 F	77.36
7623B21	92.98	84.47	1 M	89.10	2 M	94.81	3 M	95.03	4 F	86.35	5 F	80.63	6 F	89.17	7 F	82.58	8 F	83.61
7631B22	103.74	88.10	1 M	104.87	2 M	105.14	3 M	105.95	4 M	98.98	5 F	91.75	6 F	82.09	7 F	87.85	8 F	90.73
7578B23	96.75	91.99	1 M	98.25	2 M	98.42	3 M	98.08	4 M	92.26	5 F	84.99	6 F	87.80	7 F	92.89	8 F	102.29
7527B24	93.08	86.78	1 M	94.12	2 M	98.36	3 M	86.13	4 M	93.69	5 F	90.12	6 F	87.72	7 F	86.59	8 F	82.68
7524B25	104.01	97.05	1 M	104.01	2 F	95.21	3 F	103.86	4 F	90.77	5 F	98.37						
7552B26	99.91	88.72	1 M	96.07	2 M	100.55	3 M	100.65	4 M	102.37	5 F	89.62	6 F	88.48	7 F	89.54	8 F	87.25
7590B27	93.91	84.32	1 M	94.77	2 M	89.80	3 M	97.15	4 F	81.84	5 F	91.43	6 F	88.63	7 F	76.20	8 F	83.48
7566B28	95.77	90.39	1 M	100.74	2 M	101.76	3 M	90.50	4 M	90.10	5 F	88.08	6 F	97.87	7 F	88.78	8 F	86.81
MEAN	95.39	86.09																
S.D.	4.20	4.42																
N	27	27																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E	P S U E
	M	F	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT	P X WEIGHT
7550C01	91.74	83.76	1 M 90.69	2 M 94.49	3 M 88.58	4 M 93.20	5 F 82.36	6 F 85.33	7 F 83.01	8 F 84.35						
7588C02	94.90	82.53	1 M 93.93	2 M 93.62	3 M 90.13	4 M 101.93	5 F 84.15	6 F 80.40	7 F 81.12	8 F 84.44						
7556C03	87.52	83.67	1 M 86.04	2 M 86.04	3 M 88.32	4 M 89.70	5 F 85.12	6 F 82.78	7 F 84.03	8 F 82.77						
7633C04	83.61	74.45	1 M 83.51	2 M 76.18	3 M 86.71	4 M 88.03	5 F 76.31	6 F 76.27	7 F 69.05	8 F 76.18						
7533C05	100.71	91.15	1 M 102.18	2 M 98.97	3 M 102.15	4 M 99.54	5 F 92.15	6 F 90.07	7 F 90.73	8 F 91.64						
7504C06	90.02	76.18	1 M 96.65	2 M 93.39	3 M 95.08	4 M 74.96	5 F 86.67	6 F 77.32	7 F 54.83	8 F 85.92						
7582C07	97.55	88.60	1 M 96.25	2 M 102.15	3 M 98.00	4 M 93.80	5 F 90.21	6 F 78.42	7 F 91.61	8 F 94.15						
7624C08	95.84	93.22	1 M 97.68	2 M 93.28	3 M 100.03	4 M 92.38	5 F 94.74	6 F 95.60	7 F 92.88	8 F 89.66						
7542C09	101.74	93.06	1 M 106.51	2 M 103.55	3 M 95.47	4 M 99.72	5 M 103.44	6 F 92.11	7 F 93.11	8 F 93.96						
7543C10	109.01	105.71	1 M 104.85	2 M 113.18	3 F 106.16	4 F 105.25										
7572C11	100.21	94.31	1 M 99.98	2 M 99.52	3 M 105.24	4 M 96.09	5 F 92.82	6 F 92.65	7 F 91.56	8 F 100.19						
7573C12	101.04	84.65	1 M 102.93	2 M 104.73	3 M 101.19	4 M 92.21	5 M 104.14	6 F 84.93	7 F 80.64	8 F 88.37						
7616C13	92.31	83.87	1 M 96.71	2 M 88.36	3 M 95.06	4 M 89.13	5 F 85.75	6 F 84.41	7 F 83.15	8 F 82.15						
7540C14	92.66	88.63	1 M 91.69	2 M 88.69	3 M 94.48	4 M 95.78	5 F 88.07	6 F 97.24	7 F 87.54	8 F 81.68						
7617C15	94.52	86.61	1 M 88.38	2 M 99.41	3 M 96.52	4 M 93.76	5 F 90.90	6 F 89.34	7 F 84.41	8 F 81.81						
7565C16	99.76	86.66	1 M 98.74	2 M 92.88	3 M 105.35	4 M 102.06	5 F 92.35	6 F 89.08	7 F 84.14	8 F 81.05						
7516C17	95.40	83.36	1 M 94.81	2 M 89.27	3 M 102.13	4 F 84.50	5 F 87.32	6 F 89.71	7 F 82.46	8 F 72.83						
7625C18	101.89	92.63	1 M 111.04	2 M 105.84	3 M 88.78	4 F 96.77	5 F 96.40	6 F 98.72	7 F 81.28	8 F 90.00						
7626C19	94.82	86.33	1 M 95.32	2 M 90.75	3 M 98.84	4 M 94.38	5 F 79.61	6 F 85.93	7 F 91.93	8 F 87.85						
7559C20	92.68	84.69	1 M 95.58	2 M 86.19	3 M 97.80	4 M 95.08	5 M 88.76	6 F 86.47	7 F 81.97	8 F 85.64						
7546C21	96.43	87.96	1 M 95.74	2 M 91.71	3 M 102.36	4 M 95.90	5 F 86.96	6 F 86.04	7 F 90.06	8 F 88.79						
7571C22	95.28	86.00	1 M 103.14	2 M 92.31	3 M 96.42	4 M 89.24	5 F 87.49	6 F 89.40	7 F 79.45	8 F 87.68						
7606C23	94.30	83.81	1 M 95.49	2 M 94.60	3 M 92.20	4 M 93.99	5 M 95.20	6 F 91.46	7 F 80.57	8 F 79.40						
7498C24	96.51	93.20	1 M 92.95	2 M 97.19	3 M 95.29	4 M 100.61	5 F 94.62	6 F 95.19	7 F 92.40	8 F 90.60						
7615C25	101.70	91.30	1 M 100.06	2 M 102.48	3 M 99.26	4 M 104.99	5 F 84.04	6 F 97.18	7 F 92.14	8 F 91.84						
7612C26	86.97	80.64	1 M 94.27	2 M 89.54	3 M 80.81	4 M 83.25	5 F 79.90	6 F 81.17	7 F 80.69	8 F 80.80						
7589C27	86.63	74.66	1 M 85.78	2 M 87.49	3 M 87.79	4 M 85.47	5 F 74.59	6 F 78.41	7 F 68.96	8 F 76.69						
7502C28	101.32	91.25	1 M 96.97	2 M 107.54	3 M 102.30	4 M 98.48	5 F 86.62	6 F 92.75	7 F 94.73	8 F 90.89						
MEAN	95.61	86.89														
S.D.	5.67	6.56														
N	28	28														

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F1 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
7495D01	85.41	79.29	1 M	84.09	2 M	86.70	3 M	87.95	4 M	82.89	5 F	83.76	6 F	71.96	7 F	79.52	8 F	81.91
7539D02	87.83	87.43	1 M	86.42	2 M	80.48	3 M	93.67	4 M	90.73	5 F	85.28	6 F	88.68	7 F	90.54	8 F	85.22
7519D03	77.35	70.67	1 M	78.16	2 M	76.98	3 M	77.63	4 M	76.61	5 F	73.92	6 F	69.00	7 F	67.86	8 F	71.92
7515D04	88.61	79.04	1 M	86.27	2 M	86.81	3 M	89.16	4 M	92.22	5 F	81.70	6 F	79.92	7 F	74.24	8 F	80.29
7568D05	86.15	78.38	1 M	86.81	2 M	85.59	3 M	82.13	4 M	90.08	5 F	73.63	6 F	78.91	7 F	79.21	8 F	81.78
7636D06	91.95	83.50	1 M	94.10	2 M	94.73	3 M	91.42	4 M	87.54	5 F	84.84	6 F	80.19	7 F	86.24	8 F	82.74
7545D07	91.09	81.54	1 M	86.43	2 M	92.95	3 M	97.77	4 M	85.71	5 M	91.03	6 M	92.63	7 F	78.45	8 F	84.64
7575D08	93.37	86.94	1 M	95.47	2 M	99.72	3 M	91.40	4 M	86.90	5 F	85.64	6 F	90.31	7 F	87.49	8 F	84.33
7584D09	82.76	80.11	1 M	80.14	2 M	85.52	3 M	80.98	4 M	84.40	5 F	81.74	6 F	78.24	7 F	76.97	8 F	83.51
7610D10	93.12	85.15	1 M	92.78	2 M	93.78	3 M	96.33	4 M	89.59	5 F	77.99	6 F	97.29	7 F	84.60	8 F	80.71
7536D11	80.67	77.59	1 M	82.29	2 M	84.19	3 M	82.38	4 M	73.83	5 F	80.10	6 F	81.29	7 F	74.54	8 F	74.42
7591D12	85.05	74.33	1 M	88.06	2 M	78.95	3 M	88.13	4 F	76.73	5 F	68.09	6 F	78.18				
7554D13	98.55	85.61	1 M	94.70	2 M	94.44	3 M	97.74	4 M	107.32	5 F	83.54	6 F	88.85	7 F	81.83	8 F	88.22
7557D14	89.25	82.12	1 M	85.85	2 M	89.16	3 M	92.73	4 F	81.22	5 F	84.24	6 F	89.72	7 F	77.15	8 F	78.25
7548D15	116.16	84.95	1 M	91.99	2 M	102.07	3 M	92.58	4 M	177.99	5 F	81.73	6 F	87.18	7 F	87.00	8 F	83.89
7569D16	87.73	82.36	1 M	93.16	2 M	85.91	3 M	88.24	4 M	83.60	5 F	85.35	6 F	77.95	7 F	75.64	8 F	90.51
7632D18	88.50	84.13	1 M	90.57	2 M	87.63	3 M	84.83	4 M	90.98	5 F	92.49	6 F	86.27	7 F	82.48	8 F	75.28
7528D19	96.23	84.54	1 M	94.75	2 M	95.93	3 M	97.56	4 M	96.69	5 F	84.93	6 F	89.72	7 F	78.12	8 F	85.40
7547D20	88.38	84.23	1 M	90.63	2 M	87.39	3 M	89.86	4 M	85.65	5 F	85.78	6 F	87.58	7 F	81.03	8 F	82.53
7549D21	90.44	78.88	1 M	90.21	2 M	90.95	3 M	87.90	4 M	92.70	5 F	81.48	6 F	71.73	7 F	80.88	8 F	81.42
7583D22	96.38	84.06	1 M	95.80	2 M	95.08	3 M	94.07	4 M	100.58	5 F	84.98	6 F	76.69	7 F	86.51	8 F	88.06
7523D23	91.59	82.93	1 M	91.73	2 M	93.44	3 M	90.03	4 M	91.16	5 F	88.36	6 F	80.61	7 F	82.03	8 F	80.72
7544D24	92.10	81.09	1 M	93.29	2 M	95.76	3 M	84.04	4 M	95.29	5 F	82.59	6 F	80.40	7 F	84.92	8 F	76.46
7637D25	95.36	85.74	1 M	98.67	2 M	90.01	3 M	97.41	4 M	95.34	5 F	80.90	6 F	88.85	7 F	88.74	8 F	84.49
7594D26	77.89	68.22	1 M	82.28	2 M	79.33	3 M	76.13	4 M	73.83	5 F	65.74	6 F	73.91	7 F	67.52	8 F	65.71
7596D27	96.38	86.08	1 M	99.10	2 M	94.45	3 M	96.50	4 M	95.47	5 F	79.37	6 F	85.03	7 F	87.66	8 F	92.26
7510D28	90.71	86.65	1 M	90.41	2 M	89.18	3 M	90.23	4 M	93.02	5 F	88.97	6 F	96.56	7 F	82.48	8 F	78.57
MEAN	90.33	81.69																
S.D.	7.50	4.80																
N	27	27																



TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
F1 ADULT FEMALES GROUP: 0.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>a</sup>	MALE NO. AFTER SECOND SWITCH <sup>d</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
21450	21360			25-NOV-88	17-DEC-88	22	
21451	21365			24-NOV-88	15-DEC-88	21	
21452	21351			24-NOV-88	16-DEC-88	22	
21453	21356			24-NOV-88	16-DEC-88	22	
21454	21341			24-NOV-88	15-DEC-88	21	
21455	21348			24-NOV-88	16-DEC-88	22	
21456	21349			25-NOV-88	17-DEC-88	22	
21457 <sup>c</sup>	21354						
21458	21358			25-NOV-88	17-DEC-88	22	
21459	21361			26-NOV-88	18-DEC-88	22	
21460	21353			27-NOV-88	19-DEC-88	22	
21461	21343			25-NOV-88	17-DEC-88	22	
21462	21359			26-NOV-88	17-DEC-88	21	
21463	21342			25-NOV-88	17-DEC-88	22	
21464	21364	21339	21362	10-DEC-88	31-DEC-88	21	
21465	21340			24-NOV-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21466	21344			26-NOV-88	18-DEC-88	22	
21467	21363			24-NOV-88	16-DEC-88	22	
21468	21352			25-NOV-88	18-DEC-88	23	
21469	21338			25-NOV-88	17-DEC-88	22	
21470	21355			27-NOV-88	19-DEC-88	22	
21471	21357			24-NOV-88	16-DEC-88	22	
21472	21339	21354		5-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21473	21362	21364	21339	14-DEC-88 <sup>d</sup>	17-DEC-88	3	
21474	21350			25-NOV-88	17-DEC-88	22	
21475	21347			25-NOV-88	17-DEC-88	22	
21476	21345			24-NOV-88	16-DEC-88	22	
21477	21346			25-NOV-88	17-DEC-88	22	

<sup>a</sup> Date of switch, November 30, 1988.

<sup>b</sup> Date of switch, December 7, 1988.

<sup>c</sup> Female died prior to mating.

<sup>d</sup> Missed plug, possible successful mating with the first male.

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
F1 ADULT FEMALES GROUP: 300.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>a</sup>	MALE NO. AFTER SECOND SWITCH <sup>b</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
21478	21384			24-NOV-88	16-DEC-88	22	
21479	21369	21372	21379	10-DEC-88	31-DEC-88	21	
21480	21376			24-NOV-88	16-DEC-88	22	
21481	21392			25-NOV-88	17-DEC-88	22	
21482	21377	21379	21390	14-DEC-88 <sup>d</sup>	17-DEC-88	3	
21483	21368	21369	21372	13-DEC-88	3-JAN-89	21	
21484	21390	21393	21368	14-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21485	21375			26-NOV-88	18-DEC-88	22	
21486	21378			26-NOV-88	18-DEC-88	22	
21487	21388			25-NOV-88	17-DEC-88	22	
21488	21381			26-NOV-88	18-DEC-88	22	
21489 <sup>c</sup>	21393						
21490	21371			24-NOV-88	16-DEC-88	22	
21491	21387			25-NOV-88	17-DEC-88	22	
21492	21382			27-NOV-88	19-DEC-88	22	
21493	21374			25-NOV-88	18-DEC-88	23	
21494	21379	21389		6-DEC-88	28-DEC-88	22	
21495	21389	21390	21393	14-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21496	21372	21377		3-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21497	21391			26-NOV-88	18-DEC-88	22	
21498	21370			26-NOV-88	18-DEC-88	22	
21499	21366			27-NOV-88	20-DEC-88	23	
21500	21386			24-NOV-88	16-DEC-88	22	
21501	21373			27-NOV-88	19-DEC-88	22	
21502	21367			25-NOV-88	17-DEC-88	22	
21503	21383			25-NOV-88	17-DEC-88	22	
21504	21380			26-NOV-88	18-DEC-88	22	
21505	21385			25-NOV-88	17-DEC-88	22	

<sup>a</sup> Date of switch, November 30, 1988.

<sup>b</sup> Date of switch, December 7, 1988.

<sup>c</sup> Female died prior to mating.

<sup>d</sup> Missed plug, possible successful mating with the first male.

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
F1 ADULT FEMALES GROUP: 1000.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>a</sup>	MALE NO. AFTER SECOND SWITCH <sup>b</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
21506	21410			24-NOV-88	16-DEC-88	22	
21507	21406			24-NOV-88	15-DEC-88	21	
21508	21396			24-NOV-88	16-DEC-88	22	
21509	21405			25-NOV-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21510	21409			26-NOV-88	19-DEC-88	23	
21511	21407			25-NOV-88	17-DEC-88	22	
21512	21403			24-NOV-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21513	21416			27-NOV-88	19-DEC-88	22	
21514	21400			26-NOV-88	18-DEC-88	22	
21515	21411			25-NOV-88	17-DEC-88	22	
21516	21402			25-NOV-88	17-DEC-88	22	
21517	21414			28-NOV-88	20-DEC-88	22	
21518	21401			26-NOV-88	18-DEC-88	22	
21519	21420	21397	21419	12-DEC-88	3-JAN-89	22	
21520	21399	21412		5-DEC-88	26-DEC-88	21	
21521	21404			27-NOV-88	19-DEC-88	22	
21522	21398	21399		7-DEC-88	29-DEC-88	22	
21523	21395			25-NOV-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21524	21397	21398		7-DEC-88	29-DEC-88	22	
21525	21394			27-NOV-88	20-DEC-88	23	
21526	21412	21419	21420	11-DEC-88	3-JAN-89	23	
21527	21419	21420	21397	14-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21528	21413			24-NOV-88	16-DEC-88	22	
21529	21408			26-NOV-88	18-DEC-88	22	
21530	21418			24-NOV-88	16-DEC-88	22	
21531	21417			27-NOV-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21532	21415			26-NOV-88	18-DEC-88	22	
21533	21421			25-NOV-88	18-DEC-88	23	

<sup>a</sup> Date of switch, November 30, 1988.

<sup>b</sup> Date of switch, December 7, 1988.

TABLE 1  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL MATING AND PREGNANCY DATA  
F1 ADULT FEMALES GROUP: 2000.0 PPM

FEMALE NUMBER	MALE NUMBER	MALE NO. AFTER FIRST SWITCH <sup>a</sup>	MALE NO. AFTER SECOND SWITCH <sup>b</sup>	IMPREGNATION DATE	DELIVERY DATE	GESTATION LENGTH IN DAYS	UTERINE STAINING RESULTS
21534	21422			24-NOV-88	16-DEC-88	22	
21535	21436			27-NOV-88	19-DEC-88	22	
21536	21433			28-NOV-88	20-DEC-88	22	
21537	21447			26-NOV-88	17-DEC-88	21	
21538	21426			26-NOV-88	17-DEC-88	21	
21539	<sup>e</sup>	21427	<sup>e</sup>	14-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21540	21446			25-NOV-88	17-DEC-88	22	
21541	21445			29-NOV-88	21-DEC-88	22	
21542	21439			27-NOV-88	19-DEC-88	22	
21543	21441			24-NOV-88	16-DEC-88	22	
21544	21425			26-NOV-88	18-DEC-88	22	
21545	21432	<sup>e</sup>	21427	14-DEC-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21546	21444			25-NOV-88	17-DEC-88	22	
21547	21435			24-NOV-88	16-DEC-88	22	
21548	21429			24-NOV-88	15-DEC-88	21	
21549	21427	21430		1-DEC-88	22-DEC-88	21	
21550	21434			25-NOV-88	17-DEC-88	22	
21551	21438			25-NOV-88	17-DEC-88	22	
21552	21448			27-NOV-88	19-DEC-88	22	
21553	21423			24-NOV-88	16-DEC-88	22	
21554	21437			26-NOV-88	18-DEC-88	22	
21555	21431			25-NOV-88	18-DEC-88	23	
21556	21443			27-NOV-88	19-DEC-88	22	
21557	21428			25-NOV-88	17-DEC-88	22	
21558	21430	21432		6-DEC-88	28-DEC-88	22	
21559	21442			26-NOV-88	18-DEC-88	22	
21560	21424			24-NOV-88	DID NOT DELIVER	--	NO IMPLANTATION SITES
21561	21440			26-NOV-88	18-DEC-88	22	

<sup>a</sup> Date of switch, November 30, 1988.

<sup>b</sup> Date of switch, December 7, 1988.

<sup>e</sup> No male placed with female during this period because of death of male No. 21449 prior to mating.

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 0.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
21450 P		244.83	265.90	302.96	364.37			
21451 P		280.92	322.12	367.02	436.67			
21452 P		273.91	308.54	334.51	384.97			
21453 P		248.60	267.60	305.55	367.30			
21454 P		269.61	301.31	332.02	398.83			
21455 P		293.11	308.92	336.03	401.84			
21456 P		275.14	298.34	340.39	421.36			
21458 P		260.82	285.46	324.70	388.45			
21459 P		260.70	282.25	314.08	364.24			
21460 P		271.96	304.11	338.51	416.74			
21461 P		269.21	299.84	326.37	368.05			
21462 P		286.01	306.30	349.78	425.18			
21463 P		264.64	283.89	316.27	355.19			
21464 P		309.84	330.11	362.85	427.78			
21465 NP		286.33	275.83	282.27	285.73	287.78	296.64	303.70
21466 P		279.77	306.95	330.25	356.46			
21467 P		271.74	291.30	316.10	352.32			
21468 P		270.61	297.54	331.79	404.44			
21469 P		264.03	290.68	331.86	389.97			
21470 P		258.02	286.83	322.82	377.19			
21471 P		283.00	303.53	326.56	391.25			
21472 NP		315.46	348.66	374.82	383.91	353.43	336.92	353.78
21473 mp		351.24						
21474 P		311.39	329.09	375.45	440.71			
21475 P		271.60	296.00	323.22	385.24			
21476 P		259.44	284.26	319.70	380.63			
21477 P		280.31	310.34	346.72	412.90			
MEAN		273.30	298.38	332.31	392.17	0.00	0.00	0.00
S.D.		16.088	16.372	18.090	26.645	0.000	0.000	0.000
N		24	24	24	24	0	0	0

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 300.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
21478 P		295.63	316.18	351.58	409.10			
21479 P		289.83	305.40	329.77	388.35			
21480 P		290.56	322.26	349.75	410.79			
21481 P		335.92	364.52	406.34	470.47			
21482 mp		411.85						
21483 P		292.43		347.42	402.52			
21484 NP		313.94	307.38	315.96	312.38	312.37	323.16	327.31
21485 P		290.29	318.49	353.12	418.35			
21486 P		296.74	321.12	352.03	419.32			
21487 P		271.62	293.14	310.15	344.89			
21488 P		307.23	334.62	375.46	434.92			
21490 P		285.43	319.93	362.76	416.87			
21491 P		287.63	314.20	340.73	399.65			
21492 P		271.24	302.42	318.26	357.72			
21493 P		237.34	260.92	295.01	337.33			
21494 P		283.62	296.54	332.34	395.55			
21495 NP		389.94	391.79	398.06	409.25	405.27	409.39	423.42
21496 NP		341.76	356.34	352.43	329.12	336.86	345.24	353.45
21497 P		255.07	276.53	305.06	361.13			
21498 P		274.87	304.05	346.72	414.90			
21499 P		249.31	269.85	282.97	298.09			
21500 P		263.79	292.53	328.44	387.91			
21501 P		272.13	303.43	332.55	391.93			
21502 P		284.40	320.86	354.62	425.46			
21503 P		277.07	299.72	331.28	390.25			
21504 P		305.94	326.38	345.13	415.89			
21505 P		271.93	291.27	325.03	378.47			
MEAN		282.17	307.20	338.11	394.34	0.00	0.00	0.00
S.D.		20.781	22.169	26.539	36.523	0.000	0.000	0.000
N		23	23	23	23	0	0	0

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 1000.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
21506 P		302.90	329.02	368.95	421.43			
21507 P		263.64	290.03	313.21	376.89			
21508 P		267.65	293.30	331.46	359.66			
21509 NP		263.34	262.09	262.22	261.90	256.25	267.04	271.63
21510 P		251.41	274.34	306.30	341.98			
21511 P		300.65	325.06	354.59	423.09			
21512 NP		268.03	306.44	329.66	334.36	311.09	299.84	293.30
21513 P		290.79	319.07	345.35	404.47			
21514 P		324.32	346.69	392.57	461.27			
21515 P		304.78	337.03	374.37	441.15			
21516 P		317.14	340.51	376.86	448.60			
21517 P		269.46	289.07	325.14	393.15			
21518 P		360.56	385.88	434.72	490.96			
21519 P		346.15	373.30	409.67	477.39			
21520 P		305.64	334.50	372.30	438.17			
21521 P		273.09	305.21	342.09	401.62			
21522 P		301.86	328.07	371.06	450.03			
21523 NP		301.78	335.25	352.48	346.48	331.84	330.93	328.23
21524 P		355.07	365.95	398.33	469.89			
21525 P		308.36	337.86	368.45	427.02			
21526 P		322.01	325.32	355.24	412.11			
21527 NP		289.21	288.36	299.85	297.84	295.32	296.14	300.23
21528 P		268.66	301.30	342.47	408.54			
21529 P		282.45	306.31	338.50	404.55			
21530 P		276.19	302.37	329.23	383.52			
21531 NP		321.76	350.39	343.43	342.62	339.33	339.08	346.11
21532 P		266.80	288.58	315.34	360.94			
21533 P		300.02	330.84	359.71	405.31			
MEAN		298.24	323.03	357.65	417.47	0.00	0.00	0.00
S.D.		29.921	28.651	32.171	38.897	0.000	0.000	0.000
N		23	23	23	23	0	0	0

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 2  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL GESTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 2000.0 PPM

PREGNANCY STATUS	DAY	0	6	15	20	28	35	42
21534 P		283.39	308.70	344.43	405.73			
21535 P		290.74	314.82	350.91	421.67			
21536 P		225.96	252.54	280.99	335.42			
21537 P		265.61	294.00	329.55	394.20			
21538 P		250.26	281.68	320.14	381.34			
21539 NP		305.90	302.85	306.93	314.24	309.18	311.89	318.33
21540 P		280.70	298.86	340.03	403.35			
21541 P		270.92	295.14	324.06	386.69			
21542 P		265.55	286.00	316.84	388.13			
21543 P		279.11	290.54	321.68	384.38			
21544 P		304.99	338.34	378.78	455.92			
21545 NP		295.91	295.80	298.65	303.12	307.14	309.32	308.32
21546 P		266.27	293.29	334.41	397.04			
21547 P		276.11	302.15	331.46	377.87			
21548 P		282.03	314.48	359.24	429.12			
21549 P		298.93	322.29	350.05	415.61			
21550 P		298.87	344.07	384.20	440.68			
21551 P		248.93	267.55	297.89	349.99			
21552 P		296.81	325.66	356.30	417.43			
21553 P		260.30	291.16	329.07	384.06			
21554 P		248.30	272.63	306.75	373.90			
21555 P		274.59	299.43	331.78	391.68			
21556 P		279.87	306.07	343.15	396.83			
21557 P		256.52	276.12	310.35	367.07			
21558 P		297.98	324.20	356.48	387.40			
21559 P		225.89	245.96	266.79	329.55			
21560 NP		251.57	247.83	253.75	258.16	265.65	262.48	265.40
21561 P		247.55	284.69	324.10	388.22			
MEAN		271.05	297.21	331.58	392.13	0.00	0.00	0.00
S.D.		21.890	24.230	27.091	29.309	0.000	0.000	0.000
N		25	25	25	25	0	0	0

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN



TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
21450	P	22		19.42	19.77	22.78	20.36	25.28	24.70					19.57	21.74
21451	P	21		24.54	26.60	29.50	27.20	30.20	29.35					25.42	28.52
21452	P	22		22.57	22.80	24.18	23.33	25.14	28.76					22.67	23.82
21453	P	22		19.43	19.26	21.28	22.19	23.31	23.30					19.35	21.67
21454	P	21		27.89	27.96	29.18	27.01	26.56	27.85					27.92	28.25
21455	P	22		24.83	23.44	27.62	24.92	29.61	31.71					24.24	26.46
21456	P	22		22.54	23.75	24.13	24.70	26.14	26.35					23.06	24.37
21458	P	22		23.99	24.65	25.37	25.96	25.29	27.89					24.27	25.63
21459	P	22		21.18	21.40	24.51	23.54	25.74	26.03					21.26	24.10
21460	P	22		23.47	26.94	26.74	25.51	27.96	28.02					24.96	26.22
21461	P	22		24.10	24.76	25.70	23.89	21.83	25.65					24.38	24.92
21462	P	21		20.55	21.79	26.62	24.29	26.68	28.43					21.08	25.62
21463	P	22		18.17	20.82	21.82	20.99	20.19	21.85					19.31	21.46
21464	P	21		25.39	27.07	28.23	24.97	27.11	23.61					26.11	26.83
21465	NP			16.42	16.57	18.19	17.03	16.51	19.57	17.81	20.35	21.25	20.71	16.48	17.69
21466	P	22		22.58	22.26	24.31	22.39	23.15	25.46					22.44	23.49
21467	P	22		21.92	21.17	23.43	22.35	23.88	25.23					21.60	22.97
21468	P	23		22.31	23.91	25.38	24.99	23.87	25.06					22.99	25.22
21469	P	22		24.34	23.64	24.72	23.44	24.41	27.63					24.04	24.17
21470	P	22		22.86	26.10	26.63	27.32	29.55	29.18					24.24	26.93
21471	P	22		21.29	21.96	23.79	22.39	24.69	24.53					21.58	23.19
21472	NP			26.25	30.00	30.02	29.42	27.17	28.63	21.25	18.11	23.79	23.94	27.86	29.76
21473	mp	3													
21474	P	22		25.57	21.81	23.97	24.82	28.82	29.07					23.95	24.34
21475	P	22		20.79	21.07	23.66	20.08	23.31	23.27					20.91	22.13
21476	P	22		19.35	21.41	23.40	22.29	23.43	25.84					20.23	22.93
21477	P	22		26.12	25.84	27.19	25.08	24.44	26.10					26.00	26.29
MEAN				22.72	23.34	25.17	23.92	25.44	26.45					22.98	24.64
S.D.				2.428	2.452	2.173	2.026	2.532	2.371					2.313	2.012
N				24	24	24	24	24	24					24	24

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
21478	P	22		20.83	22.63	24.27	25.52	25.59	26.91					21.60	24.81
21479	P	21		21.03	21.67	24.18	21.37	20.11	19.53					21.30	22.98
21480	P	22		23.29	24.30	24.14	21.77	23.73	24.22					23.73	23.12
21481	P	22		24.94	25.51	28.69	26.51	24.53	29.50					25.18	27.76
21482	mp	3													
21483	P	21		22.99	24.74	24.17	25.78	24.77	26.26					23.74	24.86
21484	NP			18.26	18.56	21.10	20.29	20.95	21.54	15.82	18.44	21.06	21.35	18.39	20.75
21485	P	22		23.63	24.46	26.64	22.85	24.92	26.34					23.99	25.01
21486	P	22		24.07	26.76	28.85	27.86	28.53	29.73					25.22	28.43
21487	P	22		21.89	22.98	22.36	21.52	22.00	22.11					22.36	22.00
21488	P	22		22.62	26.37	26.17	26.07	26.54	28.64					24.23	26.13
21490	P	22		25.41	27.06	30.24	28.46	27.76	28.69					26.12	29.48
21491	P	22		24.80	23.66	23.82	25.11	24.30	26.22					24.31	24.37
21492	P	22		26.33	25.03	24.15	32.13	29.54	30.97					25.78	27.57
21493	P	23		19.34	21.21	22.72	22.61	22.23	23.93					20.14	22.68
21494	P	22		22.90	23.93	23.53	22.81	24.35	26.02					23.35	23.22
21495	NP			24.56	24.21	23.78	26.96	24.68	26.60	21.32	21.52	24.52	29.50	24.41	25.15
21496	NP			25.90	25.42	26.32	23.08	20.10	22.30	21.06	23.87	22.40	23.31	25.69	24.93
21497	P	22		21.78	22.50	21.87	21.61	22.26	23.81					22.09	21.76
21498	P	22	r/s		25.59	r/s	25.35	24.34	27.59					a	a
21499	P	23		21.96	23.06	21.38	22.96	20.97	24.35					22.43	22.06
21500	P	22		25.73	25.03	25.01	26.31	24.28	25.68					25.43	25.56
21501	P	22		25.47	27.41	27.17	25.19	25.10	24.50					26.30	26.32
21502	P	22		23.90	25.96	26.60	23.75	25.83	27.33					24.78	25.38
21503	P	22		24.18	24.72	25.18	25.98	26.16	27.76					24.41	25.52
21504	P	22		25.29	22.48	23.79	21.60	23.60	24.99					24.09	22.85
21505	P	22		23.01	24.51	24.60	24.13	24.79	27.95					23.66	24.40
MEAN				23.43	24.42	24.98	24.66	24.62	26.22					23.83	24.83
S.D.				1.807	1.709	2.298	2.661	2.259	2.625					1.627	2.170
N				22	23	22	23	23	23					22	22

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
21506	P	22		26.31	30.61	30.10	30.87	29.84	28.05					28.15	30.43
21507	P	21		20.73	20.82	23.04	22.29	23.44	24.15					20.77	22.72
21508	P	22		23.70	22.38	27.24	24.72	25.21	24.64					23.14	26.16
21509	NP			18.86	18.79	20.05	18.41	16.67	18.89	13.01	17.16	19.28	19.92	18.83	19.35
21510	P	23		20.79	20.94	23.95	23.91	22.86	27.35					20.85	23.93
21511	P	22		24.77	26.06	27.92	24.65	23.99	27.37					25.32	26.52
21512	NP			25.33	24.53	26.10	24.09	22.03	22.57	13.72	21.08	17.46	17.69	24.99	25.24
21513	P	22		24.96	26.91	25.07	26.02	26.31	26.79					25.80	25.48
21514	P	22		24.12	24.35	29.08	25.91	26.41	24.48					24.22	27.72
21515	P	22		24.78	27.42	26.57	26.85	26.93	29.16					25.91	26.69
21516	P	22		24.93	26.81	26.57	26.59	26.80	30.53					25.73	26.58
21517	P	22		19.92	20.93	22.74	22.38	23.91	25.50					20.35	22.59
21518	P	22		24.96	26.20	30.25	27.78	26.81	28.59					25.49	29.19
21519	P	22		25.73	29.65	29.95	29.33	28.77	27.85					27.41	29.69
21520	P	21		24.02	22.91	26.87	25.08	30.38	23.63					23.55	26.10
21521	P	22		22.00	25.47	24.62	23.73	23.48	22.55					23.49	24.24
21522	P	22		21.61	24.60	24.41	26.19	25.93	28.12					22.89	25.17
21523	NP			21.25	25.12	25.80	24.14	23.02	21.46	16.78	21.26	24.79	19.51	22.91	25.09
21524	P	22		24.23	23.52	26.05	26.02	24.70	27.73					23.92	26.03
21525	P	23		25.69	27.17	27.31	28.15	27.80	27.25					26.32	27.67
21526	P	23		20.83	22.03	23.52	25.62	26.12	25.04					21.35	24.42
21527	NP			21.18	20.65	21.32	21.60	22.08	18.54	17.76	17.85	18.21	19.66	20.95	21.44
21528	P	22		25.78	26.44	26.06	29.31	30.18	31.16					26.06	27.45
21529	P	22		22.88	23.03	24.53	21.42	24.13	26.27					22.94	23.20
21530	P	22		19.65	21.01	21.51	21.22	21.49	21.32					20.23	21.39
21531	NP			21.69	26.57	24.81	22.52	17.17	17.90	16.50	17.13	19.76	20.32	23.78	23.83
21532	P	22		20.95	22.13	23.03	20.97	22.19	24.14					21.46	22.15
21533	P	23		23.59	25.85	28.71	25.95	23.04	25.21					24.56	27.52
MEAN				23.34	24.66	26.05	25.43	25.68	26.39					23.91	25.78
S.D.				2.085	2.820	2.539	2.673	2.549	2.466					2.311	2.439
N				23	23	23	23	23	23					23	23

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)

F1 ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	PS	GDD	DAY	0- 4	4- 7	7-11	11-14	14-17	17-20	20-24	24-28	28-35	35-42	0- 7	7-14
21534	P	22		23.21	22.43	21.42	25.17	20.22	28.37					22.87	23.02
21535	P	22		19.91	19.78	20.23	24.18	26.62	27.07					19.85	21.92
21536	P	22		18.41	20.27	19.57	19.34	21.74	22.22					19.21	19.47
21537	P	21		21.94	21.87	23.24	23.74	26.08	25.75					21.91	23.46
21538	P	21		21.26	20.68	22.50	20.97	20.69	23.14					21.01	21.85
21539	NP			18.35	19.11	20.38	19.53	r/s	28.66	16.34	18.26	19.20	20.86	18.67	20.02
21540	P	22		20.09	22.45	22.13	22.32	23.52	24.77					21.10	22.21
21541	P	22		19.29	23.17	21.08	21.78	24.04	22.74					20.95	21.38
21542	P	22		20.03	22.64	23.17	20.82	22.49	22.64					21.15	22.16
21543	P	22		21.81	21.23	22.04	20.99	22.87	24.17					21.56	21.59
21544	P	22		23.37	25.32	26.78	23.79	24.28	26.58					24.21	25.50
21545	NP			17.47	19.17	19.05	18.47	18.78	19.86	17.93	17.39	19.30	18.83	18.20	18.80
21546	P	22		18.46	19.63	20.73	21.80	23.80	26.31					18.96	21.19
21547	P	22		22.80	23.25	21.09	22.45	22.94	24.10					22.99	21.67
21548	P	21	r/s		28.88	28.70	34.54	26.55	36.93					a	31.21
21549	P	21		24.70	24.92	26.58	24.93	24.44	23.93					24.79	25.87
21550	P	22		25.18	30.84	31.27	26.00	26.40	25.92					27.60	29.01
21551	P	22		21.92	22.18	22.96	24.40	21.85	22.78					22.03	23.58
21552	P	22		22.52	22.66	23.61	23.29	22.32	22.68					22.58	23.47
21553	P	22		24.19	24.20	24.58	24.67	27.34	26.85					24.19	24.62
21554	P	22		21.59	22.21	22.71	23.34	23.39	25.40					21.86	22.98
21555	P	23		19.76	21.27	23.00	21.30	22.93	21.94					20.41	22.27
21556	P	22		22.25	22.46	22.20	22.47	22.50	28.69					22.34	22.31
21557	P	22		20.28	21.57	22.08	22.71	22.51	25.11					20.83	22.35
21558	P	22		22.16	23.80	24.55	26.89	26.52	24.65					22.86	25.55
21559	P	22		20.22	20.29	20.73	20.06	20.99	23.05					20.25	20.45
21560	NP			15.55	18.20	17.63	18.34	18.57	17.71	15.41	17.13	16.76	16.80	16.69	17.93
21561	P	22		17.85	21.26	21.45	23.08	25.45	26.53					19.31	22.15
MEAN				21.38	22.77	23.14	23.40	23.70	25.29					21.87	23.25
S.D.				1.992	2.604	2.726	2.966	2.029	3.089					1.990	2.589
N				24	25	25	25	25	25					24	25

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG

mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	PS	GDD	DAY 14-20
21450	P	22	24.99
21451	P	21	29.77
21452	P	22	26.95
21453	P	22	23.31
21454	P	21	27.21
21455	P	22	30.66
21456	P	22	26.25
21458	P	22	26.59
21459	P	22	25.89
21460	P	22	27.99
21461	P	22	23.74
21462	P	21	27.55
21463	P	22	21.02
21464	P	21	25.36
21465	NP		18.04
21466	P	22	24.30
21467	P	22	24.55
21468	P	23	24.46
21469	P	22	26.02
21470	P	22	29.37
21471	P	22	24.61
21472	NP		27.90
21473	mp	3	
21474	P	22	28.94
21475	P	22	23.29
21476	P	22	24.64
21477	P	22	25.27
MEAN			25.95
S.D.			2.309
N			24

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	PS	GDD	DAY	14-20
21478	P	22		26.25
21479	P	21		19.82
21480	P	22		23.97
21481	P	22		27.02
21482	mp	3		
21483	P	21		25.52
21484	NP			21.25
21485	P	22		25.63
21486	P	22		29.13
21487	P	22		22.06
21488	P	22		27.59
21490	P	22		28.23
21491	P	22		25.26
21492	P	22		30.25
21493	P	23		23.08
21494	P	22		25.18
21495	NP			25.64
21496	NP			21.20
21497	P	22		23.04
21498	P	22		25.97
21499	P	23		22.66
21500	P	22		24.98
21501	P	22		24.80
21502	P	22		26.58
21503	P	22		26.96
21504	P	22		24.30
21505	P	22		26.37
MEAN				25.42
S.D.				2.369
N				23

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
 F1 ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	PS	GDD	DAY	14-20
21506	P	22		28.94
21507	P	21		23.80
21508	P	22		24.92
21509	NP			17.78
21510	P	23		25.11
21511	P	22		25.68
21512	NP			22.30
21513	P	22		26.55
21514	P	22		25.45
21515	P	22		28.05
21516	P	22		28.67
21517	P	22		24.70
21518	P	22		27.70
21519	P	22		28.31
21520	P	21		27.00
21521	P	22		23.02
21522	P	22		27.03
21523	NP			22.24
21524	P	22		26.21
21525	P	23		27.52
21526	P	23		25.58
21527	NP			20.31
21528	P	22		30.67
21529	P	22		25.20
21530	P	22		21.41
21531	NP			17.53
21532	P	22		23.17
21533	P	23		24.13
MEAN				26.03
S.D.				2.195
N				23

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY  
 P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG  
 mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

TABLE 3  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL FOOD CONSUMED DURING GESTATION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	PS	GDD	DAY	14-20
21534	P	22		24.29
21535	P	22		26.84
21536	P	22		21.98
21537	P	21		25.91
21538	P	21		21.91
21539	NP			<sup>a</sup>
21540	P	22		24.14
21541	P	22		23.39
21542	P	22		22.56
21543	P	22		23.52
21544	P	22		25.43
21545	NP			19.32
21546	P	22		25.05
21547	P	22		23.52
21548	P	21		31.74
21549	P	21		24.19
21550	P	22		26.16
21551	P	22		22.31
21552	P	22		22.50
21553	P	22		27.10
21554	P	22		24.39
21555	P	23		22.44
21556	P	22		25.60
21557	P	22		23.81
21558	P	22		25.58
21559	P	22		22.02
21560	NP			18.14
21561	P	22		25.99
MEAN				24.50
S.D.				2.189
N				25

PS=PREGNANCY STATUS, GDD=GESTATION DAY OF DELIVERY

P=PREGNANT, NP=NOT PREGNANT, RFS=REMOVED FROM STUDY, mp=MISSED PLUG

mp, NP AND RFS WEIGHT(S) NOT INCLUDED IN CALCULATION OF MEAN

<sup>a</sup>Combined interval value removed due to removal of at least one individual interval value.



TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
21450	256.34	294.55	312.66	295.35
21451	333.89	333.97	344.88	352.75
21452	311.97	309.61	318.72	320.46
21453	278.59	289.40	318.86	329.02
21454	315.06	324.35	323.63	346.87
21455	313.97	320.80	329.40	327.73
21456	303.31	309.56	328.42	345.11
21458	286.57	304.55	328.71	326.76
21459	284.74	307.55	330.62	333.85
21460	293.55	322.27	335.93	346.93
21461	308.87	317.73	333.43	337.38
21462	325.40	332.22	343.09	353.01
21463	294.22	315.89	318.51	320.23
21464	326.04	332.62	374.64	362.08
21466	322.82	318.04	317.83	341.52
21467	298.03	302.90	325.03	317.12
21468	299.42	317.85	329.79	321.25
21469	293.22	335.71	342.45	362.10
21470	299.03	297.54	329.62	327.82
21471	282.71	309.30	322.97	325.26
21473	283.29	304.24	313.94	325.75
21474	338.43	339.45	346.99	353.58
21475	289.39	288.06	290.10	317.26
21476	292.36	298.70	322.73	319.02
21477	308.18	341.18	336.36	333.40
MEAN	301.58	314.72	328.77	333.66
S.D.	19.129	15.498	15.456	16.220
N	25	25	25	25

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
21478	323.78	329.80	333.01	337.31
21479	280.44	290.85	328.66	293.75
21480	309.39	334.90	342.26	347.31
21481	381.58	369.75	369.80	385.81
21482	357.95	363.02	354.42	361.58
21483	314.43	315.41	353.65	340.58
21485	321.36	330.01	342.98	344.94
21486	321.45	321.80	338.79	346.26
21487	282.84	313.60	312.02	317.53
21488	338.18	347.74	349.19	355.74
21490	319.41	334.20	330.66	347.80
21491	301.58	319.63	341.11	329.37
21492	312.71	304.11	310.27	299.05
21493	262.10	279.11	288.42	294.97
21494	301.23	297.03	323.53	311.74
21497	273.74	287.73	294.60	304.08
21498	304.34	294.14	300.28	315.07
21499	265.91	282.37	292.21	313.70
21500	290.42	305.00	325.91	318.30
21501	299.01	321.34	317.72	300.78
21502	329.46	326.55	333.25	340.76
21503	295.73	308.44	317.03	337.26
21504	291.21	295.26	331.98	337.19
21505	291.74	305.87	318.04	330.09
MEAN	307.08	315.74	327.07	329.62
S.D.	27.738	23.763	20.825	23.220
N	24	24	24	24

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
21506	329.33	337.20	350.01	350.15
21507	299.23	293.67	307.37	312.85
21508	318.13	326.60	334.48	335.97
21510	276.86	306.54	318.57	326.16
21511	335.70	346.07	356.03	368.18
21513	302.53	333.53	346.18	340.11
21514	330.67	340.84	346.54	340.93
21515	336.76	351.18	375.04	381.72
21516	352.86	358.09	364.58	369.31
21517	297.53	317.29	338.73	322.96
21518	399.39	372.13	391.74	407.52
21519	355.84	382.57	417.03	393.95
21520	332.91	348.34	384.84	388.07
21521	309.27	312.18	334.32	311.86
21522	339.46	335.73	339.18	342.88
21524	352.50	362.82	373.62	356.57
21525	331.35	351.56	386.94	393.98
21526	274.60	361.04	380.53	384.57
21528	281.28	309.10	342.57	340.07
21529	296.30	323.09	342.20	298.17
21530	304.85	337.40	356.18	335.65
21532	293.60	303.40	304.09	317.39
21533	328.09	340.38	347.96	353.79
MEAN	320.83	336.99	353.86	350.99
S.D.	29.730	23.044	27.523	30.286
N	23	23	23	23

TABLE 4  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL BODY WEIGHT (GRAMS)  
F1 ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	LACTATION DAY 0	7	14	21
21534	325.98	339.70	361.43	367.12
21535	307.98	331.83	356.80	356.41
21536	252.63	278.89	290.05	296.70
21537	303.21	322.86	336.73	362.66
21538	281.91	306.36	300.05	328.56
21540	294.96	320.08	314.59	352.52
21541	286.66	300.90	336.71	353.63
21542	289.95	315.98	326.63	352.15
21543	303.45	313.00	330.58	360.98
21544	333.03	358.87	375.82	362.42
21546	292.50	332.55	354.23	341.19
21547	299.82	321.70	334.54	331.57
21548	334.65	349.78	374.49	392.94
21549	308.59	305.10	327.67	337.47
21550	361.30	359.46	355.11	358.22
21551	272.93	285.20	310.85	303.34
21552	319.27	314.85	330.98	330.47
21553	280.18	305.80	316.47	332.64
21554	255.39	281.83	295.41	318.15
21555	294.41	310.01	313.85	356.01
21556	308.68	331.81	328.39	351.58
21557	288.08	303.90	335.54	338.72
21558	332.10	330.16	353.48	353.23
21559	254.12	284.46	285.02	276.21
21561	306.79	314.82	320.08	353.43
MEAN	299.54	316.80	330.62	342.73
S.D.	26.400	22.089	24.635	24.805
N	25	25	25	25

TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 0.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
21450	31.81	47.06	43.77	48.25	38.35	46.33
21451	24.26	37.00	48.50	52.35	29.72	50.70
21452	18.10	33.92	40.85	43.31	24.88	42.26
21453	28.41	41.29	48.70	54.70	33.93	52.13
21454	21.88	39.58	51.76	r/a	29.46	a
21455	28.84	39.04	53.54	58.22	33.22	56.21
21456	24.82	37.18	48.07	53.17	30.12	50.98
21458	29.10	41.37	45.41	55.66	34.36	51.27
21459	19.89	36.61	39.78	51.35	27.06	46.39
21460	37.76	39.51	46.14	54.73	38.51	51.05
21461	19.26	31.64	39.64	43.29	24.57	41.72
21462	28.01	37.00	46.56	53.58	31.86	50.57
21463	27.51	39.56	38.20	41.85	32.67	40.28
21464	24.52	26.93	46.37	63.26	25.55	56.02
21466	12.79	23.87	47.98	27.50	17.54	36.28
21467	21.14	43.03	49.77	54.78	30.52	52.63
21468	31.94	38.73	45.88	56.26	34.85	51.81
21469	34.74	49.43	51.87	61.14	41.04	57.17
21470	27.09	39.64	48.27	59.96	32.47	54.95
21471	29.34	34.52	45.46	48.71	31.56	47.32
21473	40.15	50.53	56.97	66.20	44.59	62.25
21474	32.33	40.23	50.03	60.85	35.71	56.21
21475	19.65	33.26	46.66	48.47	25.48	47.69
21476	26.13	38.81	47.79	50.72	31.56	49.46
21477	33.56	41.86	47.31	58.52	37.12	53.72
MEAN	26.92	38.46	47.01	52.78	31.87	50.23
S.D.	6.485	5.995	4.352	8.268	5.858	5.977
N	25	25	25	24	25	24

TABLE 5  
 TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
 INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
 F1 ADULT FEMALES GROUP: 300.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
21478	26.64	34.51	39.18	52.64	30.01	46.87
21479	19.01	32.93	47.03	57.46	24.98	52.99
21480	31.14	44.46	51.73	57.69	36.85	55.14
21481	20.91	28.94	43.66	52.27	24.35	48.58
21482	18.34	33.88	30.35	26.75	25.00	28.30
21483	25.77	33.31	46.88	62.39	29.00	55.74
21485	29.73	37.76	43.00	57.95	33.17	51.54
21486	31.61	42.48	49.13	61.09	36.27	55.97
21487	27.07	41.82	43.47	53.35	33.39	49.12
21488	27.76	34.85	46.58	51.54	30.80	49.42
21490	26.46	41.48	50.75	50.64	32.89	50.69
21491	30.99	41.93	50.51	60.55	35.68	56.25
21492	23.06	31.39	30.65	39.54	26.63	35.73
21493	22.35	41.35	34.44	40.18	30.49	37.72
21494	24.58	42.67	50.95	53.92	32.34	52.65
21497	26.68	38.95	33.01	53.68	31.94	44.82
21498	10.66	27.98	34.84	50.66	18.09	43.88
21499	13.63	22.47	20.33	27.02	17.42	24.16
21500	24.53	39.59	49.73	51.68	30.98	50.85
21501	28.20	33.79	44.71	56.35	30.59	51.36
21502	29.46	41.85	47.90	57.49	34.77	53.38
21503	31.62	43.13	48.60	57.77	36.55	53.84
21504	22.16	28.39	42.39	51.51	24.83	47.60
21505	25.70	37.20	41.48	53.19	30.63	48.17
MEAN	24.92	36.55	42.55	51.56	29.90	47.70
S.D.	5.458	5.881	8.131	9.347	5.304	8.429
N	24	24	24	24	24	24

TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET  
INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 1000.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
21506	23.83	38.70	43.60	46.88	30.20	45.48
21507	19.85	31.41	38.10	40.76	24.80	39.62
21508	18.81	32.86	37.43	44.07	24.83	41.22
21510	26.75	34.08	40.52	46.21	29.89	43.77
21511	32.53	36.85	49.19	46.62	34.38	47.72
21513	30.00	42.13	45.00	54.74	35.20	50.57
21514	22.37	38.86	39.57	55.03	29.44	48.41
21515	38.57	40.74	56.66	61.15	39.50	59.23
21516	24.17	41.90	45.78	58.04	31.77	52.79
21517	41.11	54.35	57.52	67.51	46.79	63.23
21518	23.60	32.47	38.16	55.92	27.40	48.31
21519	29.66	60.10	61.90	71.53	42.71	67.41
21520	30.96	44.85	49.82	57.48	36.91	54.20
21521	27.17	37.36	43.23	55.10	31.54	50.01
21522	20.01	34.44	41.45	53.26	26.20	48.20
21524	26.76	36.54	50.44	r/a	30.95	a
21525	36.55	44.65	56.95	60.46	40.02	58.96
21526	35.76	55.24	66.52	r/a	44.11	a
21528	34.07	42.19	48.36	59.05	37.55	54.47
21529	37.68	41.15	49.28	61.45	39.17	56.23
21530	31.10	45.17	52.41	51.43	37.13	51.85
21532	24.93	35.98	43.15	45.39	29.66	44.43
21533	24.64	36.54	41.97	51.21	29.74	47.25
MEAN	28.73	40.81	47.70	54.44	33.91	51.11
S.D.	6.407	7.451	7.989	7.821	6.213	7.077
N	23	23	23	21	23	21

TABLE 5  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LACTATIONAL FOOD CONSUMPTION (GRAMS/ANIMAL/DAY)  
F1 ADULT FEMALES GROUP: 2000.0 PPM

ANIMAL	DAY 0- 4	4- 7	7-10	10-14	0- 7	7-14
21534	34.75	41.01	48.86	51.21	37.43	50.21
21535	30.97	40.55	44.65	59.15	35.08	52.93
21536	21.65	37.41	36.63	44.19	28.41	40.95
21537	32.84	43.65	45.13	58.26	37.47	52.63
21538	29.82	36.58	38.05	40.07	32.71	39.21
21540	31.08	42.54	47.60	24.64	35.99	34.48
21541	23.43	36.74	43.07	60.19	29.13	52.85
21542	34.37	42.60	53.16	48.62	37.90	50.57
21543	25.24	39.27	47.44	50.38	31.25	49.12
21544	37.03	36.01	44.69	50.97	36.59	48.28
21546	34.49	48.69	54.58	65.56	40.58	60.85
21547	23.13	38.02	45.32	53.79	29.51	50.16
21548	24.40	42.24	32.48	54.78	32.04	45.23
21549	23.16	35.86	41.12	49.54	28.60	45.93
21550	26.97	39.13	46.01	47.08	32.18	46.62
21551	24.66	35.91	46.95	54.18	29.48	51.08
21552	19.11	29.57	42.10	43.06	23.59	42.65
21553	27.59	39.27	45.03	46.60	32.59	45.93
21554	21.02	36.49	42.31	48.57	27.65	45.88
21555	32.63	41.07	45.08	49.30	36.24	47.49
21556	28.56	41.34	50.22	45.07	34.04	47.27
21557	29.95	42.73	51.72	62.99	35.43	58.16
21558	21.61	32.29	40.22	47.41	26.19	44.32
21559	28.28	31.88	31.15	31.81	29.82	31.53
21561	32.95	36.20	38.61	47.69	34.34	43.79
MEAN	27.99	38.68	44.09	49.40	32.57	47.13
S.D.	5.062	4.187	5.801	8.968	4.185	6.487
N	25	25	25	25	25	25



TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		F1 ADULT FEMALES GROUP: 0.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21450	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21451	MALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21452	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD FEMALES	1 5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21453	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21454	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21455	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21456	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21458	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3
	DEAD FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	1	4	4	4	4	4
21459	MALES	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MISSING FEMALES DEAD	7 1	7	6 1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
21460	MALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21461	MALES	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	MISSING STILLBORN	1	1																						

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 0.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
	FEMALES DEAD	3	2 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21462	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21463	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21464	MALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21466	MALES UNDET. MISSING	2 1	2 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21467	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21468	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21469	MALES STILLBORN FEMALES	6 1 7	6 7	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21470	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES STILLBORN	8 1	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
21471	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	12	12	12	12	12	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21473	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21474	MALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING  
UNDET.= UNABLE TO DETERMINE SEX

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		F1 ADULT FEMALES GROUP:											0.0 PPM												
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21475	MALES	11	11	11	11	11	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	STILLBORN FEMALES	1 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21476	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21477	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 300.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21478	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21479	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21480	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21481	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES DEAD	10	9	9	9	9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			1																						
21482	MALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	UNDET. CANNIBALIZED	1																							
21483	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	MISSING STILLBORN	1						1																	
21485	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN FEMALES	1																							
	DEAD	6	6	6	6	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
						1																			
21486	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21487	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21488	MALES	7	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING FEMALES	7	1																						
		7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING  
UNDET.= UNABLE TO DETERMINE SEX

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 300.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21490	MALES FEMALES	3 9	3 9	3 9	3 9	3 9	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5
21491	MALES FEMALES	5 9	5 9	5 9	5 9	5 9	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21492	MALES FEMALES	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3
21493	MALES DEAD STILLBORN FEMALES UNDET. CANNIBALIZED	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1	3 1 1 2 1
21494	MALES DEAD STILLBORN FEMALES	5 1 1 8	5 1 1 8	5 1 1 8	5 1 1 8	5 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8	4 1 1 8
21497	MALES FEMALES	4 9	4 9	4 9	4 9	4 9	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21498	MALES FEMALES	9 6	9 6	9 6	9 6	9 6	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21499	FEMALES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21500	MALES FEMALES DEAD	7 4 2	7 4 2	7 4 2	7 4 2	7 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2	4 4 2
21501	MALES FEMALES STILLBORN	3 12 1	3 12 1	3 12 1	3 12 1	3 12 1	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5	3 5

B= BEFORE CULLING, A= AFTER CULLING  
UNDET.= UNABLE TO DETERMINE SEX

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		F1 ADULT FEMALES GROUP: 300.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21502	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21503	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
	FEMALES STILLBORN	9 1	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21504	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN FEMALES	1 7																							
21505	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 1000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21506	MALES FEMALES	7 4	7 4	7 4	7 4	7 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21507	MALES FEMALES MISSING	6 7	6 6 1	6 6	6 6	6 6	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21508	MALES FEMALES	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4	1 4
21510	MALES FEMALES	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5	2 5
21511	MALES FEMALES	6 9	6 9	6 9	6 9	6 9	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21513	MALES FEMALES	9 6	9 6	9 6	9 6	9 6	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21514	MALES FEMALES	7 6	7 6	7 6	7 6	7 6	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21515	MALES FEMALES STILLBORN	8 7 2	8 7	8 7	8 7	8 7	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21516	MALES FEMALES	6 8	6 8	6 8	6 8	6 8	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21517	MALES FEMALES	5 8	5 8	5 8	5 8	5 8	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21518	MALES FEMALES	6 10	6 10	6 10	6 10	6 10	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
21519	MALES DEAD	9	9	8 1	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

		INDIVIDUAL LITTER VIABILITY																							
		F1 ADULT FEMALES GROUP: 1000.0 PPM																							
DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21520	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21521	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21522	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES DEAD	8 1	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21524	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21525	MALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21526	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21528	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD FEMALES	1 9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21529	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21530	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21532	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21533	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING



TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 2000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21534	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21535	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
	FEMALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	2																							
21536	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21537	MALES	8	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING		1																						
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1																							
	STILLBORN	1																							
21538	MALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21540	MALES	11	11	11	11	11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21541	MALES	7	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING		1																						
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21542	MALES	10	10	9	9	9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	MISSING			1																					
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21543	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
21544	MALES	10	10	10	10	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 2000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
	DEAD	2																							
21546	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21547	MALES	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	STILLBORN	1																							
	FEMALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21548	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
21549	MALES	10	10	10	10	10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21550	MALES	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21551	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21552	MALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3
	DEAD																			1					
21553	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	9	9	9	9	9	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	STILLBORN	1																							
21554	MALES	7	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MISSING		1																						
	FEMALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21555	MALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	7	7	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

B= BEFORE CULLING, A= AFTER CULLING

TABLE 6  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL LITTER VIABILITY  
F1 ADULT FEMALES GROUP: 2000.0 PPM

DAM #	LACTATION DAYS	0	1	2	3	B 4	A 4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	28
21556	MALES	8	8	8	8	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21557	MALES	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	FEMALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	STILLBORN	1																							
21558	MALES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	FEMALES	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21559	MALES	6	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD		1																						
	FEMALES	8	8	7	7	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	DEAD	1		1																					
	STILLBORN	1																							
21561	MALES	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	FEMALES	9	9	9	9	9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	DEAD	1																							

B= BEFORE CULLING, A= AFTER CULLING

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 1			P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X	
LITTER	MEAN M	F	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
21450	6.50	6.22	1 M	6.25	2 M	6.80	3 M	6.31	4 M	6.10	5 M	6.89	6 M	6.67	7 F	6.21	8 F	6.21
			9 F	6.12	10 F	6.33	11 F	5.75	12 F	6.23	13 F	6.68						
21451	6.22	5.85	1 M	6.69	2 M	6.70	3 M	6.48	4 M	6.01	5 M	6.69	6 M	6.19	7 M	6.19	8 M	5.22
			9 M	6.24	10 M	5.78	11 F	6.05	12 F	6.22	13 F	4.89	14 F	6.23				
21452	7.34	6.96	1 M	6.95	2 M	6.35	3 M	8.14	4 M	7.63	5 M	7.64	6 F	6.77	7 F	7.17	8 F	7.20
			9 F	6.85	10 F	6.81	11 M	D 0										
21453	6.51	6.30	1 M	5.15	2 M	6.75	3 M	6.43	4 M	6.97	5 M	6.89	6 M	6.67	7 M	6.72	8 F	7.46
			9 F	5.26	10 F	6.19	11 F	5.79	12 F	6.35	13 F	6.63	14 F	6.32	15 F	6.40		
21454	6.16	5.84	1 M	5.94	2 M	6.20	3 M	5.96	4 M	6.45	5 M	6.24	6 F	5.82	7 F	5.91	8 F	5.74
			9 F	5.89	10 F	5.95	11 F	5.75										
21455	6.94	6.77	1 M	7.20	2 M	6.83	3 M	7.51	4 M	6.48	5 M	6.78	6 M	6.82	7 F	6.06	8 F	6.61
			9 F	7.43	10 F	6.66	11 F	6.77	12 F	6.78	13 F	6.65	14 F	7.19				
21456	6.54	6.14	1 M	5.99	2 M	7.17	3 M	6.62	4 M	6.10	5 M	6.25	6 M	7.17	7 M	6.47	8 F	6.82
			9 F	6.66	10 F	5.66	11 F	5.56	12 F	6.52	13 F	6.76	14 F	5.61	15 F	6.37	16 F	5.98
			17 F	5.33	18 F	6.23												
21458	7.29	7.01	1 M	7.25	2 M	7.12	3 M	7.62	4 M	7.41	5 M	7.07	6 F	6.65	7 F	7.04	8 F	7.34
			9 F	6.80	10 F	6.77	11 F	7.78	12 F	6.83	13 F	6.89						
21459	7.36	6.52	1 M	M 1	2 M	7.33	3 M	7.38	4 F	4.55	5 F	6.45	6 F	6.97	7 F	7.22	8 F	7.28
			9 F	6.66	10 F	6.53												
21460	6.27	6.16	1 M	6.07	2 M	5.75	3 M	6.51	4 M	5.34	5 M	7.34	6 M	5.99	7 M	5.43	8 M	5.81
			9 M	6.96	10 M	6.81	11 M	6.96	12 F	6.11	13 F	6.65	14 F	5.72	15 F	5.91	16 F	5.97
			17 F	6.12	18 F	6.61												
21461	7.50	7.66	1 M	M 1	2 M	7.24	3 M	7.63	4 M	7.64	5 F	D 1	6 F	7.50	7 F	7.82	8 M	s 0
21462	5.87	5																

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TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 1

LITTER	MEAN M	F	P U P X	S E W EIGHT	P U P X	S E W EIGHT	P U P X	S E W EIGHT	P U P X	S E W EIGHT	P U P X	S E W EIGHT	P U P X	S E W EIGHT	P U P X	S E W EIGHT	P U P X	S E W EIGHT
21471	5.83	5.80	1 M	6.09	2 M	5.91	3 M	5.61	4 M	5.55	5 M	6.01	6 F	5.47	7 F	5.87	8 F	6.22
			9 F	5.02	10 F	5.83	11 F	5.93	12 F	6.03	13 F	5.85	14 F	6.19	15 F	5.63	16 F	5.80
			17 F	5.73														
21473	6.45	6.13	1 M	6.32	2 M	6.62	3 M	6.49	4 M	6.29	5 M	6.72	6 M	6.28	7 F	6.04	8 F	6.05
			9 F	5.44	10 F	6.15	11 F	5.84	12 F	6.03	13 F	6.38	14 F	6.75	15 F	6.50		
21474	6.81	6.44	1 M	7.20	2 M	6.61	3 M	5.57	4 M	6.89	5 M	7.53	6 M	7.11	7 M	7.25	8 M	6.50
			9 M	6.83	10 M	6.84	11 M	6.54	12 F	6.61	13 F	6.80	14 F	6.69	15 F	5.96	16 F	6.16
21475	6.60	6.30	1 M	6.93	2 M	6.88	3 M	6.82	4 M	6.44	5 M	6.59	6 M	6.14	7 M	6.37	8 M	6.61
			9 M	6.83	10 M	6.41	11 M	6.56	12 F	6.47	13 F	6.14	14 M	s 0				
21476	7.19	6.92	1 M	7.41	2 M	6.93	3 M	7.12	4 M	6.91	5 M	7.57	6 F	6.58	7 F	6.94	8 F	6.71
			9 F	7.18	10 F	6.90	11 F	6.71	12 F	7.45								
21477	5.87	5.65	1 M	5.87	2 M	6.29	3 M	5.66	4 M	5.54	5 M	5.81	6 M	5.99	7 M	5.90	8 M	5.82
			9 M	5.91	10 F	6.22	11 F	5.57	12 F	5.36	13 F	5.48	14 F	5.97	15 F	6.00	16 F	4.98
MEAN	6.81	6.41																
S.D.	0.78	0.66																
N	25	24																

s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 1		INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 300.0 PPM															
LITTER	MEAN M F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21478	6.81 6.77	1 M 6.98	2 M 7.47	3 M 6.89	4 M 6.90	5 M 7.42	6 M 6.56	7 M 5.74	8 M 6.51								
		9 F 7.28	10 F 7.40	11 F 6.49	12 F 6.28	13 F 6.86	14 F 6.31										
21479	5.41 5.11	1 M 5.40	2 M 5.10	3 M 5.70	4 M 5.30	5 M 5.20	6 M 5.10	7 M 5.60	8 M 5.50								
		9 M 5.80	10 F 5.30	11 F 5.30	12 F 4.90	13 F 5.20	14 F 4.90	15 F 4.90	16 F 5.30								
21480	6.32 6.09	1 M 6.55	2 M 7.07	3 M 6.13	4 M 5.51	5 F 6.09	6 F 6.24	7 F 6.83	8 F 6.41								
		9 F 6.70	10 F 6.34	11 F 5.85	12 F 5.67	13 F 5.30	14 F 5.95	15 F 5.64									
21481	7.19 6.78	1 M 7.36	2 M 7.15	3 M 7.06	4 F D 1	5 F 6.63	6 F 6.60	7 F 7.10	8 F 7.47								
		9 F 6.66	10 F 6.84	11 F 5.82	12 F 6.18	13 F 7.74											
21482	8.69 -	1 M 8.63	2 M 8.75	3 U C 0													
21483	6.50 5.84	1 M 6.32	2 M 6.81	3 M 6.28	4 M 6.46	5 M 6.56	6 M 6.74	7 M 6.39	8 M 6.40								
		9 F 6.10	10 F 6.03	11 F 6.19	12 F 5.31	13 F 5.59	14 F s 0										
21485	6.39 5.97	1 M 6.15	2 M 6.88	3 M 6.36	4 M 6.32	5 M 6.40	6 M 6.03	7 M 6.49	8 M 6.47								
		9 F 6.42	10 F 5.64	11 F 5.88	12 F 6.17	13 F 5.28	14 F 6.40	15 M s 0									
21486	6.99 6.61	1 M 7.34	2 M 5.12	3 M 7.39	4 M 7.11	5 M 6.53	6 M 6.77	7 M 7.75	8 M 7.91								
		9 F 6.44	10 F 6.90	11 F 6.35	12 F 6.58	13 F 6.95	14 F 6.46										
21487	6.97 6.87	1 M 6.85	2 M 7.19	3 M 7.24	4 M 6.51	5 M 7.07	6 F 6.49	7 F 7.09	8 F 7.14								
		9 F 7.33	10 F 6.28														
21488	7.24 6.81	1 M M 1	2 M 7.69	3 M 6.92	4 M 7.22	5 M 7.81	6 M 6.80	7 M 7.00	8 F 6.90								
		9 F 7.00	10 F 6.88	11 F 6.73	12 F 6.75	13 F 6.79	14 F 6.62										
21490	7.49 7.21	1 M 7.12	2 M 7.64	3 M 7.72	4 F 6.94	5 F 7.00	6 F 7.88	7 F 7.61	8 F 7.47								
		9 F 7.49	10 F 6.97	11 F 7.38	12 F 6.17												
21491	6.69 6.06	1 M 6.45	2 M 6.26	3 M 6.78	4 M 6.90	5 M 7.08	6 F 6.65	7 F 6.09	8 F 6.48								
		9 F 5.68	10 F 4.61	11 F 6.21	12 F 6.92	13 F 5.72	14 F 6.18										
21492	8.31 7.97	1 M 8.08	2 M 8.30	3 M 8.55	4 F 7.60	5 F 8.76	6 F 7.56										
21493	7.23 7.46	1 M 7.17	2 M 7.16	3 M 7.36	4 F 7.64	5 F 7.29	6 M D 0	7 M s 0	8 U C 0								
21494	7.16 6.63	1 M D 0	2 M 7.70	3 M 7.30	4 M 6.80	5 M 7.50	6 M 6.50	7 F 6.80	8 F 6.10								
		9 F 6.60	10 F 7.20	11 F 6.40	12 F 6.80	13 F 6.50	14 F 6.60	15 M s 0									
21497	7.22 6.58	1 M 6.91	2 M 7.46	3 M 7.05	4 M 7.47	5 F 6.73	6 F 6.79	7 F 6.28	8 F 6.56								
		9 F 6.14	10 F 6.29	11 F 6.67	12 F 7.01	13 F 6.77											
21498	5.87 5.35	1 M 5.82	2 M 5.56	3 M 6.23	4 M 5.98	5 M 5.55	6 M 5.77	7 M 5.99	8 M 6.02								
		9 M 5.88	10 F 5.11	11 F 4.79	12 F 5.35	13 F 6.00	14 F 5.80	15 F 5.06									
21499	- 9.07	1 F 9.07															
21500	6.62 6.45	1 M 6.56	2 M 5.62	3 M 6.48	4 M 6.75	5 M 7.12	6 M 6.82	7 M 6.98	8 F D 0								
		9 F 6.82	10 F 5.98	11 F 6.55	12 F 6.46	13 F D 0											
21501	6.60 6.29	1 M 6.40	2 M 6.83	3 M 6.58	4 F 6.26	5 F 6.77	6 F 6.21	7 F 6.40	8 F 6.04								
		9 F 5.98	10 F 7.11	11 F 6.76	12 F 6.53	13 F 6.52	14 F 5.94	15 F 5.01	16 F s 0								
21502	7.40 7.00	1 M 7.54	2 M 7.55	3 M 7.57	4 M 7.76	5 M 7.73	6 M 6.94	7 M 7.64	8 M 7.44								
		9 M 6.42	10 F 6.78	11 F 7.20	12 F 6.61	13 F 7.03	14 F 7.40										

D= DEAD, C= CANNIBALIZED, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 300.0 PPM

LACTATION DAY: 1			P S		P S		P S		P S		P S		P S		P S		P S	
LITTER	MEAN	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21503	6.95	6.54	1 M	7.47	2 M	6.30	3 M	7.43	4 M	6.59	5 F	6.73	6 F	5.84	7 F	7.02	8 F	5.22
			9 F	6.57	10 F	6.75	11 F	6.76	12 F	6.68	13 F	7.27	14 M	D 0	15 F	s 0		
21504	5.77	5.29	1 M	5.92	2 M	6.42	3 M	5.75	4 M	5.57	5 M	5.64	6 M	5.24	7 M	5.86	8 M	5.67
			9 M	5.86	10 F	5.74	11 F	5.45	12 F	4.79	13 F	5.28	14 F	5.54	15 F	5.49	16 F	4.77
			17 M	s 0														
21505	6.23	5.79	1 M	6.37	2 M	5.86	3 M	6.74	4 M	6.36	5 M	6.26	6 M	5.76	7 F	6.01	8 F	5.88
			9 F	5.49	10 F	5.33	11 F	5.65	12 F	6.11	13 F	5.42	14 F	6.39	15 F	5.84		
MEAN	6.87	6.55																
S.D.	0.75	0.88																
N	23	23																

D= DEAD, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (AOBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 1

LITTER	MEAN M F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21506	7.30 6.80	1 M 6.58 9 F 6.44	2 M 7.45 10 F 6.91	3 M 7.30 11 F 6.96	4 M 7.14 5 M 7.29	6 M 7.70 7 M 7.63	8 F 6.89		
21507	6.09 5.56	1 M 6.19 9 F 5.58	2 M 6.15 10 F 4.61	3 M 5.99 11 F 5.79	4 M 6.01 12 F 5.72	5 M 5.90 13 F 5.87	6 M 6.31 7 F 7.51	8 F 5.79	
21508	9.02 7.51	1 M 9.02 1 M 9.55	2 F 8.03 2 M 8.98	3 F 7.63 3 F 9.12	4 F 7.63 4 F 8.73	5 F 7.23 5 F 8.62	6 F 9.05 7 F 8.55		
21510	9.28 8.81	1 M 9.55 1 M 7.67	2 M 8.98 2 M 7.63	3 F 9.12 3 M 7.48	4 F 8.73 4 M 7.52	5 F 8.62 5 M 7.16	6 F 9.05 6 M 7.87	8 F 8.22	
21511	7.55 6.98	1 M 7.67 9 F 6.79	2 M 7.63 10 F 6.74	3 M 7.48 11 F 6.74	4 M 7.52 12 F 7.29	5 M 7.16 13 F 7.49	6 M 7.87 14 F 6.74	8 F 8.22	
21513	6.54 6.00	1 M 6.46 9 M 6.53	2 M 6.28 10 F 5.69	3 M 6.36 11 F 6.59	4 M 6.65 12 F 5.57	5 M 6.52 13 F 5.64	6 M 6.63 14 F 6.23	7 M 6.81 15 F 6.26	8 M 6.59
21514	7.21 7.00	1 M 6.40 9 F 7.47	2 M 7.46 10 F 7.83	3 M 7.48 11 F 7.10	4 M 7.26 12 F 6.87	5 M 7.44 13 F 5.43	6 M 7.50 7 M 6.94	8 F 7.31	
21515	6.83 6.71	1 M 6.33 9 F 6.47	2 M 7.11 10 F 7.11	3 M 7.11 11 F 6.93	4 M 7.66 12 F 6.74	5 M 6.36 13 F 6.64	6 M 6.78 14 F 6.92	7 M 6.58 15 F 6.16	8 M 6.68 16 F 6.16
21516	6.94 6.69	1 M 7.12 9 F 6.43	2 M 7.15 10 F 6.28	3 M 6.38 11 F 7.47	4 M 6.74 12 F 6.27	5 M 7.33 13 F 6.52	6 M 6.92 14 F 6.60	7 F 6.76 8 F 7.21	
21517	7.10 6.19	1 M 7.51 9 F 5.61	2 M 6.40 10 F 5.75	3 M 7.72 11 F 6.57	4 M 6.86 12 F 6.41	5 M 7.00 13 F 6.32	6 F 6.54 7 F 5.81	8 F 6.50	
21518	7.03 6.68	1 M 7.12 9 F 6.33	2 M 6.29 10 F 7.16	3 M 6.91 11 F 6.86	4 M 7.88 12 F 6.47	5 M 7.66 13 F 6.81	6 M 6.35 14 F 5.94	7 F 7.25 15 F 7.06	8 F 6.30 16 F 6.63
21519	7.07 6.63	1 M 6.18 9 M 7.10	2 M 7.37 10 F 7.13	3 M 7.25 11 F 6.24	4 M 6.77 12 F 6.35	5 M 7.35 13 F 5.98	6 M 6.77 14 F 7.15	7 M 7.41 15 F 6.92	8 M 7.43 16 F 6.92
21520	5.55 5.25	1 M 5.30 9 M 5.46	2 M 5.46 10 F 5.34	3 M 5.25 11 F 4.98	4 M 5.35 12 F 5.24	5 M 5.18 13 F 5.70	6 M 6.72 14 F 4.97	7 M 5.70 15 F 5.67	8 M 5.56 16 F 4.87
21521	6.71 6.45	1 M 6.30 9 F 6.63	2 M 6.96 10 F 6.86	3 M 7.19 11 F 6.38	4 M 6.67 12 F 6.55	5 M 6.73 13 F 6.30	6 M 6.40 14 F 6.72	7 M 6.71 15 F 6.08	8 F 6.06 16 F 6.43
21522	7.29 6.97	1 M 7.67 9 F 7.16	2 M 7.15 10 F 7.34	3 M 7.16 11 F 6.80	4 M 7.51 12 F 6.33	5 M 6.57 13 F 6.62	6 M 7.65 14 F 7.03	7 F 7.46 15 F 7.03	8 F 7.03 D O
21524	6.65 6.24	1 M 6.42 9 F 6.51	2 M 6.38 10 F 6.24	3 M 6.73 11 F 6.16	4 M 7.14 12 F 5.25	5 M 6.30 13 F 5.89	6 M 6.77 14 F 6.91	7 M 6.81 15 F 6.01	8 F 6.57 16 F 6.65
21525	7.60 6.94	1 M 8.09 9 M 7.21	2 M 7.98 10 M 6.90	3 M 7.77 11 F 7.77	4 M 7.64 12 F 5.60	5 M 8.09 13 F 6.75	6 M 6.09 14 F 6.95	7 M 7.53 15 F 7.20	8 M 7.21 16 F 7.36
21526	6.85 6.41	1 M 6.77 9 F 6.63	2 M 6.87 10 F 6.44	3 M 6.34 11 F 6.05	4 M 7.14 12 F 6.37	5 M 7.28 13 F 6.24	6 M 6.56 7 M 6.42	8 F 7.02 8 F 6.14	
21528	6.45 6.20	1 M 6.52 9 F 6.26	2 M 6.33 10 F 5.58	3 M 6.44 11 F 6.15	4 M 6.48 12 F 5.73	5 M 6.48 13 F 6.89	6 F 6.17 14 F 6.48	7 F 6.42 15 M D O	

D= DEAD, M= MISSING, s= STILLBORN



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 1			P S		P S		P S		P S		P S		P S		P S		P S	
LITTER	MEAN		U E		U E		U E		U E		U E		U E		U E		U E	
	M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
21529	6.70	6.58	1 M	6.97	2 M	6.97	3 M	6.81	4 M	6.65	5 M	6.67	6 M	6.66	7 M	6.23	8 M	6.64
			9 F	6.85	10 F	6.14	11 F	6.88	12 F	6.52	13 F	5.96	14 F	6.60	15 F	6.99	16 F	6.73
21530	7.53	6.91	1 M	7.97	2 M	7.95	3 M	7.21	4 M	6.91	5 M	7.66	6 M	7.23	7 M	7.81	8 F	6.83
			9 F	6.98	10 F	6.84	11 F	6.98										
21532	7.23	6.96	1 M	7.37	2 M	7.37	3 M	7.52	4 M	6.79	5 M	7.32	6 M	7.27	7 M	6.97	8 F	7.00
			9 F	6.87	10 F	6.95	11 F	7.01										
21533	9.15	7.95	1 M	9.53	2 M	8.89	3 M	9.03	4 F	8.55	5 F	8.58	6 F	5.66	7 F	9.03		
MEAN	7.20	6.71																
S.D.	0.90	0.74																
N	23	23																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 1		INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 2000.0 PPM																	
LITTER	MEAN M F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21534	6.76 6.34	1 M 6.71	2 M 6.63	3 M 6.66	4 M 7.06	5 F 6.39	6 F 6.24	7 F 6.52	8 F 4.31										
21535	7.48 6.93	9 F 6.69	10 F 6.64	11 F 6.62	12 F 6.79	13 F 6.44	14 F 6.74	15 F 6.07	16 F 7.18	17 F 5.96									
21536	6.56 6.21	1 M 7.40	2 M 7.41	3 M 7.60	4 M 7.44	5 M 7.54	6 F 6.07	7 F 7.18	8 F 5.96										
21537	6.01 5.31	9 F 7.11	10 F 7.33	11 F 6.93	12 F 7.43	13 F 7.33	14 F 7.38	15 F 6.54	16 M D O										
21538	5.80 5.55	17 F s O	18 F s O	1 M 5.59	2 M 6.08	3 M 5.84	4 M 5.93	5 M 5.86	6 M 5.83	7 M 5.99	8 M 5.13								
21540	6.55 5.90	1 M 5.98	2 M 6.22	3 M 6.59	4 M 6.75	5 M 6.60	6 M 6.13	7 M 6.43	8 M 6.52										
21541	6.59 5.90	9 M 6.61	10 M 6.31	11 M 6.95	12 F 5.59	13 F 6.37	14 F 5.65	15 F 5.99											
21542	7.22 6.96	1 M 5.79	2 M 4.77	3 M 6.59	4 M 6.00	5 M 6.09	6 M 6.70	7 M 7.00	8 F 5.93										
21543	7.77 7.42	9 F 7.35	10 M 7.69	11 F 7.64	12 F 5.39	13 F 7.85	14 F 6.24	15 F 6.23	16 F 5.61										
21544	6.20 5.89	1 M 7.47	2 M 7.81	3 M 7.89	4 M 7.65	5 M 7.76	6 M 7.95	7 F 7.65	8 F 7.47										
21546	6.99 6.84	9 F 6.97	10 F 7.76	11 F 7.27	12 F s O	1 M 6.76	2 M 6.28	3 M 5.64	4 M 5.81	5 M 5.95	6 M 6.37	7 M 6.46	8 M 5.98						
21547	7.75 7.21	9 M 6.34	10 M 6.37	11 F 6.37	12 F D O	13 F D O	14 F 6.65	15 F 6.01	16 F 5.09										
21548	6.00 5.82	17 F 5.99	18 F 5.94	1 M 7.33	2 M 7.25	3 M 6.45	4 M 7.14	5 M 7.00	6 M 6.73	7 M 7.01	8 F 6.79								
21549	6.63 6.18	9 F 6.99	10 F 7.04	11 F 6.54	12 F 6.70	13 F 6.59	14 F 7.20	15 F 6.59	16 F 7.20										
21550	7.61 7.26	1 M 8.19	2 M 7.67	3 M 7.48	4 M 7.72	5 M 7.38	6 M 7.93	7 M 7.85	8 F 6.84										
21551	7.09 6.68	9 F 7.57	10 M s O	1 M 6.41	2 M 5.81	3 M 5.94	4 M 5.85	5 M 5.97	6 F 5.47	7 F 5.82	8 F 6.24								
21552	6.87 6.62	9 F 5.61	10 F 5.51	11 F 5.78	12 F 6.62	13 F 5.54	14 F s O	15 F 7.01	16 M 6.40	17 M 5.27									
		1 M 6.67	2 M 7.08	3 M 6.75	4 M 6.42	5 M 7.20	6 M 7.01	7 M 6.40	8 M 5.27										
		9 M 6.56	10 M 6.89	11 F 6.92	12 F 5.51	13 F 6.10	14 F 6.97	15 F 6.73	16 F 7.35	17 F 7.06									
		1 M 7.79	2 M 8.00	3 M 7.44	4 M 7.87	5 M 6.97	6 F 6.73	7 F 7.35	8 F 7.06										
		9 F 7.28	10 F 7.36	11 F 7.99	12 F 7.02	13 F 7.19	14 F 6.98	15 F 6.54	16 F 7.51	17 F 7.23									
		1 M 6.78	2 M 7.23	3 M 7.14	4 M 6.18	5 F 6.39	6 F 6.65	7 F 6.78	8 F 7.13										
		9 F 6.09	10 F 6.46	11 F 6.73	12 F 6.55	13 F 6.65	14 F 6.74	15 F 6.44	16 F 6.46										
		1 M 6.76	2 M 6.91	3 M 7.28	4 M 6.16	5 M 6.74	6 M 6.74	7 M 6.74	8 F 6.46										
		9 F 6.60	10 F 6.87	11 F 6.84	12 F 6.16	13 F 6.74	14 F 6.74	15 F 6.44	16 F 6.46										

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 1

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21553	6.68	6.41	1 M	6.65	2 M	6.69	3 M	6.41	4 M	6.96	5 F	6.49	6 F	6.55	7 F	6.73	8 F	6.40
			9 F	6.42	10 F	6.34	11 F	6.50	12 F	5.67	13 F	6.63	14 F	s 0				
21554	6.29	6.17	1 M	6.17	2 M	6.38	3 M	6.56	4 M	6.63	5 M	6.29	6 M	6.07	7 M	5.83	8 F	5.79
			9 F	6.17	10 F	6.12	11 F	6.10	12 F	5.89	13 F	5.56	14 F	7.78	15 F	5.96		
21555	7.62	7.37	1 M	7.78	2 M	7.97	3 M	7.61	4 M	7.64	5 M	7.50	6 M	7.19	7 F	7.17	8 F	7.66
			9 F	7.25	10 F	7.86	11 F	6.57	12 F	7.24	13 F	7.87						
21556	7.22	6.86	1 M	7.66	2 M	7.17	3 M	6.73	4 M	7.17	5 M	6.53	6 M	7.57	7 M	6.94	8 M	7.95
			9 F	7.33	10 F	6.48	11 F	6.63	12 F	6.83	13 F	6.77	14 F	7.14				
21557	7.60	7.42	1 M	7.94	2 M	7.51	3 M	7.64	4 M	7.50	5 M	7.60	6 M	7.79	7 M	7.12	8 M	7.70
			9 F	7.49	10 F	7.64	11 F	7.13	12 F	s 0								
21558	8.33	7.40	1 M	8.60	2 M	8.40	3 M	8.60	4 M	7.70	5 F	7.50	6 F	7.30				
21559	5.12	4.79	1 M	4.22	2 M	4.76	3 M	5.44	4 M	4.88	5 M	5.50	6 M	5.01	7 F	5.15	8 F	5.59
			9 F	4.22	10 F	5.62	11 F	4.37	12 F	4.81	13 F	3.65	14 F	4.90	15 F	0 0	16 F	s 0
21561	7.42	7.02	1 M	7.39	2 M	7.62	3 M	7.26	4 F	0 0	5 F	7.29	6 F	6.99	7 F	6.79	8 F	7.15
			9 F	7.30	10 F	6.65	11 F	6.89	12 F	7.13	13 F	7.01						
MEAN	6.89	6.50																
S.D.	0.74	0.72																
N	25	25																

0= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)		INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 0.0 PPM																	
LITTER	MEAN M F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21450	8.71 8.77	1 M 9.56	2 M 9.07	3 M 8.58	4 M 8.81	5 M 8.00	6 M 8.22	7 F 8.56	8 F 8.51										
		9 F 9.11	10 F 8.59	11 F 8.30	12 F 9.65	13 F 8.66													
21451	8.71 8.24	1 M 9.10	2 M 9.26	3 M 8.90	4 M 8.35	5 M 9.24	6 M 8.78	7 M 8.41	8 M 7.49										
		9 M 9.07	10 M 8.55	11 F 9.22	12 F 8.21	13 F 8.55	14 F 6.96												
21452	10.60 10.48	1 M 10.76	2 M 10.89	3 M 11.17	4 M 11.33	5 M 8.85	6 F 10.75	7 F 10.59	8 F 10.56										
		9 F 10.41	10 F 10.11	11 M D 0															
21453	9.41 9.02	1 M 9.57	2 M 10.11	3 M 7.83	4 M 9.88	5 M 9.72	6 M 9.31	7 M 9.43	8 F 10.47										
		9 F 9.77	10 F 9.45	11 F 9.19	12 F 8.24	13 F 7.57	14 F 7.97	15 F 9.54											
21454	9.08 8.70	1 M 9.39	2 M 9.43	3 M 9.27	4 M 9.14	5 M 8.17	6 F 8.84	7 F 8.41	8 F 8.83										
		9 F 8.28	10 F 8.97	11 F 8.90															
21455	9.84 9.67	1 M 9.85	2 M 10.43	3 M 10.47	4 M 9.88	5 M 9.17	6 M 9.21	7 F 9.43	8 F 9.61										
		9 F 9.20	10 F 10.40	11 F 10.66	12 F 9.19	13 F 9.88	14 F 8.97												
21456	8.98 8.19	1 M 9.68	2 M 8.34	3 M 10.11	4 M 8.85	5 M 8.32	6 M 8.68	7 M 8.87	8 F 8.79										
		9 F 9.00	10 F 8.28	11 F 6.28	12 F 7.89	13 F 9.84	14 F 6.79	15 F 7.77	16 F 8.12										
		17 F 8.54	18 F 8.76																
21458	11.15 10.15	1 M 10.80	2 M 11.08	3 M 11.63	4 M 10.88	5 M 11.36	6 F 12.23	7 F 10.23	8 F 10.47										
		9 F 10.27	10 F 9.19	11 F 9.98	12 F 9.68	13 F 9.19													
21459	10.81 10.46	1 M M 1	2 M 10.80	3 M 10.81	4 F D 2	5 F 10.32	6 F 9.98	7 F 10.70	8 F 11.02										
		9 F 10.51	10 F 10.21																
21460	8.75 8.44	1 M 9.40	2 M 8.30	3 M 10.20	4 M 8.30	5 M 10.20	6 M 7.90	7 M 10.20	8 M 9.00										
		9 M 7.10	10 M 8.40	11 M 7.30	12 F 9.10	13 F 9.10	14 F 8.70	15 F 7.30	16 F 8.00										
		17 F 8.30	18 F 8.60																
21461	11.37 11.86	1 M M 1	2 M 11.29	3 M 11.76	4 M 11.05	5 F D 1	6 F 11.93	7 F 11.78	8 M s 0										
21462	8.36 7.75	1 M 8.21	2 M 8.68	3 M 7.90	4 M 8.63	5 M 8.32	6 M 8.53	7 M 9.10	8 M 7.53										
		9 F 7.90	10 F 7.83	11 F 7.75	12 F 8.27	13 F 7.77	14 F 7.05	15 F 8.29	16 F 7.13										
21463	10.42 10.42	1 M 9.83	2 M 10.92	3 M 10.49	4 M 10.44	5 F 10.20	6 F 10.65	7 F 10.39	8 F 10.84										
		9 F 9.69	10 F 10.73																
21464	6.55 6.37	1 M 7.13	2 M 6.49	3 M 5.78	4 M 6.80	5 M 7.35	6 M 6.49	7 M 6.34	8 M 5.70										
		9 M 7.21	10 M 6.72	11 M 5.99	12 F 6.87	13 F 5.83	14 F 5.89	15 F 6.83	16 F 6.51										
		17 F 6.19	18 F 6.46																
21466	12.52 -	1 M 12.89	2 M 12.14	3 U M 1															
21467	12.93 12.01	1 M 12.71	2 M 13.72	3 M 12.70	4 M 12.61	5 F 12.47	6 F 11.41	7 F 12.15											
21468	10.67 10.14	1 M 10.15	2 M 11.16	3 M 10.74	4 M 10.73	5 M 10.55	6 F 10.96	7 F 10.44	8 F 9.94										
		9 F 10.12	10 F 11.18	11 F 9.48	12 F 9.90	13 F 8.47	14 F 11.03	15 F 9.75	16 F 10.29										
21469	10.88 10.40	1 M 11.37	2 M 11.06	3 M 10.93	4 M 10.07	5 M 11.22	6 M 10.60	7 F 10.45	8 F 10.14										
		9 F 10.57	10 F 10.43	11 F 10.35	12 F 10.51	13 F 10.35	14 M s 0												
21470	11.47 10.85	1 M 11.40	2 M 11.80	3 M 11.20	4 F 10.50	5 F 11.90	6 F 9.90	7 F 11.20	8 F 11.10										
		9 F 11.20	10 F 10.00	11 F 11.00	12 F s 0														

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 4 (PRE CULL)

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21471	8.14	8.59	1 M	8.09	2 M	8.17	3 M	8.64	4 M	6.99	5 M	8.83	6 F	9.26	7 F	8.81	8 F	8.44
			9 F	8.91	10 F	9.57	11 F	8.81	12 F	8.61	13 F	8.08	14 F	9.53	15 F	8.24	16 F	7.88
			17 F	6.93														
21473	9.59	9.13	1 M	9.44	2 M	9.63	3 M	9.58	4 M	9.33	5 M	9.85	6 M	9.74	7 F	9.18	8 F	10.13
			9 F	9.45	10 F	7.97	11 F	9.62	12 F	8.54	13 F	9.54	14 F	9.52	15 F	8.23		
21474	9.59	9.35	1 M	8.12	2 M	9.67	3 M	10.15	4 M	10.40	5 M	10.08	6 M	9.48	7 M	10.04	8 M	8.67
			9 M	10.49	10 M	9.45	11 M	8.93	12 F	8.99	13 F	9.35	14 F	9.51	15 F	10.05	16 F	8.86
21475	9.13	8.81	1 M	8.75	2 M	9.73	3 M	9.17	4 M	9.02	5 M	9.29	6 M	9.22	7 M	8.44	8 M	8.93
			9 M	9.33	10 M	8.69	11 M	9.81	12 F	9.06	13 F	8.56	14 M	s 0				
21476	10.74	10.21	1 M	10.69	2 M	11.05	3 M	10.72	4 M	11.04	5 M	10.19	6 F	10.21	7 F	10.62	8 F	10.72
			9 F	9.70	10 F	9.99	11 F	9.91	12 F	10.32								
21477	8.84	8.41	1 M	7.95	2 M	8.63	3 M	8.43	4 M	8.24	5 M	9.45	6 M	9.35	7 M	9.59	8 M	8.48
			9 M	9.43	10 F	7.74	11 F	8.40	12 F	7.95	13 F	7.99	14 F	8.09	15 F	9.60	16 F	9.12
MEAN	9.89	9.43																
S.D.	1.45	1.32																
N	25	24																

s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 300.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21478	9.16	9.52	1 M 9.90	2 M 9.53	3 M 9.06	4 M 10.42	5 M 9.61	6 M 7.93	7 M 8.77	8 M 8.05								
			9 F 10.02	10 F 10.42	11 F 9.07	12 F 9.79	13 F 8.97	14 F 8.84										
21479	7.23	6.94	1 M 7.10	2 M 7.14	3 M 7.66	4 M 7.25	5 M 7.09	6 M 7.18	7 M 6.83	8 M 7.01								
			9 M 7.80	10 F 6.46	11 F 6.67	12 F 7.44	13 F 7.01	14 F 6.98	15 F 6.98	16 F 7.02								
21480	8.94	8.76	1 M 7.52	2 M 8.27	3 M 10.25	4 M 9.72	5 F 9.21	6 F 7.53	7 F 8.21	8 F 9.21								
			9 F 8.50	10 F 8.54	11 F 8.29	12 F 9.53	13 F 9.60	14 F 8.34	15 F 9.44									
21481	10.13	9.18	1 M 10.24	2 M 9.79	3 M 10.36	4 F 10.19	5 F 9.27	6 F 9.29	7 F 10.52	8 F 7.57								
			9 F 8.27	10 F 8.58	11 F 10.19	12 F 9.47	13 F 9.46											
21482	14.02	-	1 M 14.18	2 M 13.85	3 U C 0													
21483	10.27	8.60	1 M 9.94	2 M 10.25	3 M 10.55	4 M 10.09	5 M 10.36	6 M 10.10	7 M 10.27	8 M 10.63								
			9 F 9.13	10 F 8.50	11 F 7.32	12 F 9.06	13 F 8.99	14 F 8.0										
21485	8.93	8.16	1 M 9.42	2 M 8.89	3 M 8.93	4 M 8.54	5 M 9.56	6 M 8.52	7 M 8.70	8 M 8.91								
			9 F 10.4	10 F 9.13	11 F 7.70	12 F 8.74	13 F 8.85	14 F 6.37	15 M 8.0									
21486	10.85	10.86	1 M 11.59	2 M 10.51	3 M 8.12	4 M 11.68	5 M 11.51	6 M 10.10	7 M 11.65	8 M 11.67								
			9 F 11.20	10 F 11.02	11 F 10.78	12 F 10.99	13 F 10.57	14 F 10.63										
21487	10.27	10.28	1 M 9.91	2 M 10.00	3 M 10.79	4 M 10.01	5 M 10.62	6 F 10.44	7 F 9.60	8 F 10.08								
			9 F 10.83	10 F 10.46														
21488	10.70	10.69	1 M 10.79	2 M 10.79	3 M 11.25	4 M 10.56	5 M 9.59	6 M 11.51	7 M 10.50	8 F 11.03								
			9 F 10.85	10 F 10.54	11 F 10.81	12 F 10.49	13 F 10.70	14 F 10.42										
21490	10.77	10.75	1 M 11.11	2 M 10.35	3 M 10.85	4 F 11.30	5 F 10.81	6 F 11.30	7 F 11.16	8 F 9.47								
			9 F 10.93	10 F 10.77	11 F 10.77	12 F 10.26												
21491	9.64	8.94	1 M 9.37	2 M 10.59	3 M 9.00	4 M 10.40	5 M 8.83	6 F 8.53	7 F 9.20	8 F 8.43								
			9 F 9.39	10 F 7.16	11 F 9.46	12 F 8.95	13 F 9.36	14 F 9.96										
21492	12.50	11.97	1 M 13.10	2 M 12.20	3 M 12.20	4 F 12.90	5 F 11.70	6 F 11.30										
21493	12.34	12.84	1 M 12.16	2 M 12.31	3 M 12.56	4 F 12.58	5 F 13.09	6 M 8.0	7 M 9.12	8 U C 0								
21494	10.14	9.69	1 M 10.54	2 M 9.44	3 M 9.44	4 M 10.72	5 M 10.95	6 M 9.04	7 F 9.12	8 F 9.86								
			9 F 9.59	10 F 11.00	11 F 9.20	12 F 9.86	13 F 9.57	14 F 9.34	15 M 8.0									
21497	10.19	9.57	1 M 9.92	2 M 10.47	3 M 10.47	4 M 9.88	5 F 9.79	6 F 9.62	7 F 9.29	8 F 9.45								
			9 F 10.04	10 F 9.70	11 F 9.62	12 F 9.00	13 F 9.65											
21498	7.28	6.75	1 M 7.24	2 M 7.47	3 M 7.34	4 M 7.46	5 M 7.39	6 M 6.97	7 M 7.01	8 M 6.96								
			9 M 7.72	10 F 7.43	11 F 6.61	12 F 5.86	13 F 6.59	14 F 6.79	15 F 7.22									
21499	-	10.45	1 F 10.45															
21500	9.45	9.25	1 M 10.36	2 M 9.91	3 M 8.90	4 M 9.78	5 M 9.41	6 M 9.46	7 M 8.36	8 F 8.0								
			9 F 9.56	10 F 9.98	11 F 9.36	12 F 8.11	13 F 9.00											
21501	9.57	9.05	1 M 9.70	2 M 9.40	3 M 9.60	4 F 8.40	5 F 9.00	6 F 9.30	7 F 10.20	8 F 9.50								
			9 F 9.20	10 F 9.20	11 F 9.10	12 F 9.90	13 F 9.70	14 F 8.50	15 F 6.60	16 F 8.0								
21502	10.83	10.61	1 M 11.09	2 M 11.33	3 M 10.91	4 M 10.57	5 M 11.94	6 M 10.47	7 M 11.34	8 M 9.26								
			9 M 10.59	10 F 10.16	11 F 10.86	12 F 10.49	13 F 11.10	14 F 10.45										

D= DEAD, C= CANNIBALIZED, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 300.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21503	9.91	9.66	1 M 10.29	2 M 9.46	3 M 9.56	4 M 10.34	5 F 10.28	6 F 10.20	7 F 10.35	8 F 9.83								
			9 F 9.09	10 F 10.18	11 F 9.34	12 F 7.77	13 F 9.89	14 M D 0	15 F s 0									
21504	8.46	7.80	1 M 8.78	2 M 7.77	3 M 8.08	4 M 9.00	5 M 8.18	6 M 8.12	7 M 8.33	8 M 9.26								
			9 M 8.65	10 F 7.94	11 F 7.18	12 F 8.21	13 F 7.15	14 F 7.65	15 F 8.10	16 F 8.40								
			17 M s 0															
21505	8.74	8.20	1 M 9.69	2 M 8.38	3 M 8.13	4 M 9.52	5 M 8.39	6 M 8.31	7 F 8.42	8 F 8.09								
			9 F 7.55	10 F 8.87	11 F 8.59	12 F 7.77	13 F 8.48	14 F 7.33	15 F 8.69									
MEAN	10.01	9.50																
S.D.	1.55	1.47																
N	23	23																

D= DEAD, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 1000.0 PPM															
LITTER	MEAN M	F	P U E P X	S E I G H T	P U E P X	S E I G H T	P U E P X	S E I G H T	P U E P X	S E I G H T	P U E P X	S E I G H T	P U E P X	S E I G H T	P U E P X	S E I G H T	P U E P X	S E I G H T
21506	10.37	10.00	1 M	8.59	2 M	11.00	3 M	10.80	4 M	10.89	5 M	10.34	6 M	10.18	7 M	10.79	8 F	9.40
			9 F	10.38	10 F	10.23	11 F	9.98										
21507	8.82	8.09	1 M	8.68	2 M	8.86	3 M	8.95	4 M	8.56	5 M	9.03	6 M	8.81	7 F	M 1	8 F	8.41
			9 F	8.43	10 F	8.77	11 F	8.12	12 F	8.58	13 F	6.23						
21508	12.76	11.24	1 M	12.76	2 F	11.17	3 F	11.55	4 F	10.65	5 F	11.60						
21510	13.90	13.48	1 M	14.50	2 M	13.30	3 F	13.80	4 F	13.60	5 F	13.40	6 F	13.00	7 F	13.60		
21511	10.47	9.96	1 M	10.65	2 M	11.18	3 M	10.04	4 M	10.67	5 M	10.28	6 M	10.02	7 F	10.30	8 F	9.42
			9 F	10.08	10 F	9.84	11 F	9.94	12 F	11.00	13 F	9.16	14 F	9.47	15 F	10.47		
21513	9.12	8.72	1 M	9.00	2 M	8.90	3 M	9.40	4 M	8.80	5 M	9.20	6 M	9.80	7 M	8.70	8 M	9.20
			9 M	9.10	10 F	9.40	11 F	8.80	12 F	8.30	13 F	8.30	14 F	9.00	15 F	8.50		
21514	10.86	10.43	1 M	11.12	2 M	11.40	3 M	10.62	4 M	10.55	5 M	11.10	6 M	10.02	7 M	11.18	8 F	9.47
			9 F	11.71	10 F	10.96	11 F	10.69	12 F	8.35	13 F	11.37						
21515	10.24	10.28	1 M	10.19	2 M	9.73	3 M	9.21	4 M	10.40	5 M	11.04	6 M	10.42	7 M	10.66	8 M	10.25
			9 F	9.14	10 F	11.03	11 F	10.17	12 F	10.56	13 F	9.85	14 F	11.24	15 F	9.98	16 F	s 0
			17 F	s 0														
21516	9.64	8.94	1 M	9.45	2 M	8.68	3 M	10.28	4 M	10.11	5 M	9.96	6 M	9.37	7 F	7.69	8 F	9.79
			9 F	8.20	10 F	10.47	11 F	8.96	12 F	8.93	13 F	9.10	14 F	8.35				
21517	10.91	9.55	1 M	11.84	2 M	11.05	3 M	10.07	4 M	10.72	5 M	10.86	6 F	10.79	7 F	9.76	8 F	8.51
			9 F	8.91	10 F	10.14	11 F	9.85	12 F	10.21	13 F	8.22						
21518	10.45	9.96	1 M	11.20	2 M	10.39	3 M	10.95	4 M	10.61	5 M	10.14	6 M	9.38	7 F	9.79	8 F	9.76
			9 F	10.46	10 F	10.27	11 F	10.59	12 F	10.97	13 F	9.46	14 F	8.71	15 F	10.11	16 F	9.52
21519	11.12	10.47	1 M	D 2	2 M	10.55	3 M	10.89	4 M	10.64	5 M	11.51	6 M	11.56	7 M	12.13	8 M	11.86
			9 M	9.85	10 F	10.38	11 F	11.40	12 F	10.22	13 F	10.68	14 F	10.37	15 F	9.78		
21520	7.75	7.66	1 M	7.53	2 M	7.20	3 M	9.04	4 M	7.68	5 M	7.92	6 M	7.28	7 M	8.19	8 M	7.89
			9 M	7.00	10 F	7.35	11 F	8.10	12 F	7.68	13 F	7.06	14 F	8.05	15 F	7.89	16 F	7.47
			17 F	7.69														
21521	8.69	8.59	1 M	8.20	2 M	9.50	3 M	8.30	4 M	8.00	5 M	8.90	6 M	9.40	7 M	8.50	8 F	8.80
			9 F	8.90	10 F	8.60	11 F	9.10	12 F	8.00	13 F	8.30	14 F	9.00	15 F	7.80	16 F	8.80
21522	9.59	9.53	1 M	10.12	2 M	8.44	3 M	9.08	4 M	8.89	5 M	10.51	6 M	10.48	7 F	10.72	8 F	9.14
			9 F	8.30	10 F	8.92	11 F	9.88	12 F	10.39	13 F	10.53	14 F	8.32	15 F	D 0		
21524	9.51	8.74	1 M	9.60	2 M	9.50	3 M	10.18	4 M	8.84	5 M	9.89	6 M	9.24	7 M	9.32	8 F	9.06
			9 F	9.32	10 F	8.53	11 F	7.29	12 F	9.14	13 F	9.18	14 F	9.51	15 F	8.86	16 F	7.78
21525	10.49	10.12	1 M	8.83	2 M	11.73	3 M	10.59	4 M	9.16	5 M	10.21	6 M	10.65	7 M	10.08	8 M	11.31
			9 M	10.75	10 M	11.61	11 F	8.62	12 F	10.01	13 F	11.67	14 F	10.52	15 F	9.38	16 F	10.50
21526	10.43	10.23	1 M	10.77	2 M	10.79	3 M	9.50	4 M	10.48	5 M	10.39	6 M	10.99	7 M	10.06	8 F	10.40
			9 F	9.98	10 F	9.99	11 F	9.93	12 F	10.14	13 F	10.97						
21528	9.76	9.36	1 M	10.24	2 M	9.14	3 M	10.04	4 M	10.13	5 M	9.27	6 F	9.44	7 F	9.78	8 F	9.82
			9 F	8.92	10 F	9.42	11 F	10.35	12 F	9.09	13 F	8.99	14 F	8.46	15 M	D 0		

D= DEAD, M= MISSING, s= STILLBORN



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (PRE CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 1000.0 PPM															
LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21529	10.18	9.36	1 M 9.63	2 M 10.45	3 M 10.29	4 M 9.96	5 M 10.59	6 M 9.44	7 M 10.47	8 M 10.63								
			9 F 9.71	10 F 8.50	11 F 9.84	12 F 9.35	13 F 8.40	14 F 8.73	15 F 10.30	16 F 10.08								
21530	11.15	10.22	1 M 10.18	2 M 10.97	3 M 11.57	4 M 11.72	5 M 11.18	6 M 11.26	7 M 11.17	8 F 10.18								
			9 F 10.20	10 F 10.29	11 F 10.22													
21532	10.54	10.14	1 M 11.16	2 M 10.44	3 M 10.67	4 M 10.79	5 M 10.47	6 M 9.44	7 M 10.84	8 F 9.93								
			9 F 10.11	10 F 10.34	11 F 10.18													
21533	13.86	12.64	1 M 13.39	2 M 14.87	3 M 13.32	4 F 14.01	5 F 13.30	6 F 9.11	7 F 14.16									
MEAN	10.46	9.90																
S.D.	1.48	1.31																
N	23	23																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 4 (PRE CULL)

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X
21534	9.90	9.50	1 M	9.88	2 M	9.85	3 M	9.49	4 M	10.38	5 F	6.91	6 F	10.25	7 F	9.61	8 F	9.88
21535	10.76	9.99	9 F	9.71	10 F	9.27	11 F	9.83	12 F	10.29	13 F	9.70	14 F	9.55				
			1 M	11.30	2 M	10.60	3 M	11.10	4 M	10.20	5 M	10.60	6 F	8.90	7 F	9.60	8 F	9.50
			9 F	10.40	10 F	10.40	11 F	10.90	12 F	10.10	13 F	9.90	14 F	10.20	15 F	10.00	16 M	D 0
21536	8.89	8.83	17 F	s 0	18 F	s 0												
			1 M	6.91	2 M	8.74	3 M	9.34	4 M	9.41	5 M	8.68	6 M	9.43	7 M	9.79	8 M	8.92
21537	8.86	8.14	9 M	8.83	10 F	8.80	11 F	8.88	12 F	8.88	13 F	8.74						
			1 M	M 1	2 M	8.88	3 M	8.53	4 M	8.73	5 M	9.07	6 M	9.05	7 M	8.60	8 M	9.17
			9 F	7.94	10 F	8.88	11 F	8.15	12 F	8.07	13 F	7.96	14 F	8.01	15 F	7.97	16 F	D 0
21538	8.84	8.43	17 F	s 0														
			1 M	9.03	2 M	8.84	3 M	9.09	4 M	9.05	5 M	8.56	6 M	8.00	7 M	8.98	8 M	8.93
21540	9.89	9.19	9 M	9.08	10 F	8.32	11 F	8.23	12 F	8.28	13 F	8.61	14 F	8.77	15 F	8.40		
			1 M	10.24	2 M	10.07	3 M	11.10	4 M	10.34	5 M	9.19	6 M	9.94	7 M	9.84	8 M	9.26
21541	9.03	7.97	9 M	9.70	10 M	9.87	11 M	9.28	12 F	8.64	13 F	8.73	14 F	9.91	15 F	9.48		
			1 M	M 1	2 M	8.96	3 M	9.43	4 M	8.64	5 M	9.55	6 M	8.45	7 M	9.12	8 F	8.77
21542	11.49	10.60	9 F	8.87	10 F	7.94	11 F	7.91	12 F	7.77	13 F	8.39	14 F	8.25	15 F	7.84	16 F	6.03
			1 M	M 2	2 M	11.40	3 M	11.30	4 M	11.90	5 M	11.40	6 M	11.00	7 M	11.10	8 M	11.20
21543	11.09	11.07	9 M	12.30	10 M	11.80	11 F	11.60	12 F	8.10	13 F	12.10						
			1 M	11.22	2 M	10.91	3 M	10.82	4 M	11.14	5 M	11.31	6 M	11.15	7 F	10.97	8 F	11.15
21544	9.30	8.53	9 F	11.21	10 F	10.74	11 F	11.26	12 F	s 0								
			1 M	9.54	2 M	9.28	3 M	9.85	4 M	9.37	5 M	9.66	6 M	9.20	7 M	9.25	8 M	9.38
			9 M	8.80	10 M	8.68	11 F	D 0	12 F	D 0	13 F	8.77	14 F	8.31	15 F	7.51	16 F	9.14
21546	10.36	10.22	17 F	8.30	18 F	9.13												
			1 M	11.03	2 M	9.04	3 M	10.15	4 M	10.48	5 M	10.74	6 M	10.78	7 M	10.28	8 F	10.60
21547	11.56	11.15	9 F	9.81	10 F	10.39	11 F	10.04	12 F	10.24	13 F	10.22	14 F	10.23				
			1 M	11.26	2 M	11.69	3 M	11.69	4 M	11.70	5 M	12.20	6 M	10.86	7 M	11.50	8 F	10.71
21548	8.74	8.53	9 F	11.59	10 M	s 0												
			1 M	9.37	2 M	8.62	3 M	8.83	4 M	8.77	5 M	8.11	6 F	8.38	7 F	9.10	8 F	8.62
21549	9.59	9.18	9 F	8.40	10 F	8.40	11 F	7.84	12 F	8.53	13 F	8.98	14 F	s 0				
			1 M	9.42	2 M	9.72	3 M	9.89	4 M	10.31	5 M	10.10	6 M	7.31	7 M	9.69	8 M	9.38
21550	11.54	11.17	9 M	9.85	10 M	10.24	11 F	9.71	12 F	8.59	13 F	9.24						
			1 M	11.93	2 M	11.33	3 M	10.77	4 M	11.92	5 M	11.76	6 F	11.85	7 F	10.76	8 F	12.05
21551	10.16	9.52	9 F	11.80	10 F	10.82	11 F	10.76	12 F	10.16								
			1 M	9.97	2 M	9.74	3 M	10.54	4 M	10.38	5 F	10.05	6 F	9.71	7 F	10.12	8 F	10.58
21552	9.74	9.60	9 F	8.08	10 F	9.70	11 F	9.31	12 F	8.54	13 F	9.63						
			1 M	9.80	2 M	9.40	3 M	9.80	4 M	10.50	5 M	9.60	6 M	9.50	7 M	9.60	8 F	9.30
			9 F	9.00	10 F	10.00	11 F	10.00	12 F	9.70	13 F	9.80	14 F	9.00	15 F	10.00		

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 4 (PRE CULL)

LITTER	MEAN		P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT
	M	F																
21553	9.18	8.79	1 M	9.28	2 M	8.71	3 M	9.75	4 M	8.97	5 F	8.65	6 F	8.57	7 F	8.98	8 F	8.94
			9 F	8.83	10 F	8.96	11 F	8.50	12 F	8.42	13 F	9.25	14 F	s 0				
21554	8.50	8.49	1 M	M 1	2 M	7.93	3 M	8.48	4 M	8.65	5 M	8.87	6 M	8.19	7 M	8.90	8 F	8.66
			9 F	8.52	10 F	8.69	11 F	8.36	12 F	8.40	13 F	7.24	14 F	8.64	15 F	9.44		
21555	11.24	10.87	1 M	11.04	2 M	11.59	3 M	10.42	4 M	11.53	5 M	11.37	6 M	11.49	7 F	11.74	8 F	12.00
			9 F	10.94	10 F	10.69	11 F	10.76	12 F	8.81	13 F	11.12						
21556	10.55	10.34	1 M	10.62	2 M	10.73	3 M	10.69	4 M	10.22	5 M	10.95	8 M	9.68	7 M	10.39	8 M	11.12
			9 F	10.18	10 F	10.74	11 F	10.17	12 F	10.82	13 F	9.66	14 F	10.48				
21557	11.01	10.85	1 M	11.43	2 M	10.93	3 M	10.77	4 M	10.23	5 M	10.84	6 M	11.51	7 M	11.32	8 M	11.01
			9 F	11.02	10 F	10.56	11 F	10.96	12 F	s 0								
21558	13.67	12.45	1 M	14.40	2 M	13.50	3 M	14.30	4 M	12.50	5 F	12.60	6 F	12.30				
21559	7.45	7.28	1 M	D 1	2 M	7.01	3 M	7.87	4 M	8.15	5 M	7.08	6 M	7.12	7 F	D 2	8 F	6.68
			9 F	6.01	10 F	8.18	11 F	8.44	12 F	7.32	13 F	7.64	14 F	6.70	15 F	D 0	16 F	s 0
21561	11.27	10.85	1 M	11.18	2 M	11.50	3 M	11.12	4 F	D 0	5 F	10.42	6 F	10.78	7 F	10.14	8 F	11.13
			9 F	10.77	10 F	11.49	11 F	11.26	12 F	11.12	13 F	10.55						
MEAN	10.10	9.66																
S.D.	1.34	1.27																
N	25	25																

D= DEAD, M= MISSING, s= STILLBORN

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 4 (POST CULL)

LACTATION DAY: 4 (POST CULL)			P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X		P S U E P X	
LITTER	MEAN M	F	WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT	
21450	8.53	8.91	1 M	c	2 M	9.07	3 M	c	4 M	8.81	5 M	8.00	6 M	8.22	7 F	c	8 F	c
			9 F	9.11	10 F	8.59	11 F	8.30	12 F	9.65	13 F	c						
21451	8.75	8.24	1 M	c	2 M	9.26	3 M	c	4 M	c	5 M	c	6 M	8.78	7 M	8.41	8 M	c
			9 M	c	10 M	8.55	11 F	9.22	12 F	8.21	13 F	8.55	14 F	6.96				
21452	10.42	10.46	1 M	10.76	2 M	10.89	3 M	11.17	4 M	c	5 M	8.85	6 F	10.75	7 F	10.59	8 F	c
			9 F	10.41	10 F	10.11	11	D 0										
21453	9.68	8.80	1 M	c	2 M	10.11	3 M	c	4 M	9.88	5 M	c	6 M	9.31	7 M	9.43	8 F	10.47
			9 F	c	10 F	c	11 F	9.19	12 F	c	13 F	7.57	14 F	7.97	15 F	c		
21454	8.99	8.78	1 M	9.39	2 M	c	3 M	9.27	4 M	9.14	5 M	8.17	6 F	8.84	7 F	8.41	8 F	c
			9 F	c	10 F	8.97	11 F	8.90										
21455	9.53	9.47	1 M	9.85	2 M	c	3 M	c	4 M	9.88	5 M	9.17	6 M	9.21	7 F	c	8 F	9.61
			9 F	9.20	10 F	c	11 F	c	12 F	9.19	13 F	9.88	14 F	c				
21456	9.02	8.42	1 M	9.68	2 M	c	3 M	c	4 M	8.85	5 M	c	6 M	8.68	7 M	8.87	8 F	c
			9 F	c	10 F	8.28	11 F	c	12 F	c	13 F	c	14 F	c	15 F	c	16 F	8.12
			17 F	8.54	18 F	8.76												
21458	11.22	9.84	1 M	10.80	2 M	11.08	3 M	11.63	4 M	c	5 M	11.36	6 F	c	7 F	10.23	8 F	c
			9 F	10.27	10 F	c	11 F	c	12 F	9.68	13 F	9.19						
21459	10.81	10.46	1 M	10.51	2 M	10.80	3 M	10.81	4	D 2	5 F	10.32	6 F	9.98	7 F	10.70	8 F	11.02
			9 F	10.51	10 F	10.21												
21460	9.70	8.88	1 M	9.40	2 M	c	3 M	c	4 M	c	5 M	10.20	6 M	c	7 M	10.20	8 M	9.00
			9 M	c	10 M	c	11 M	c	12 F	9.10	13 F	9.10	14 F	8.70	15 F	c	16 F	c
			17 F	c	18 F	8.60												
21461	11.37	11.86	1 M	11.29	2 M	11.76	3 M	11.76	4 M	11.05	5	D 1	6 F	11.93	7 F	11.78	8	s 0
21462	8.45	7.91	1 M	c	2 M	c	3 M	c	4 M	8.63	5 M	c	6 M	8.53	7 M	9.10	8 M	7.53
			9 F	c	10 F	7.83	11 F	7.75	12 F	c	13 F	7.77	14 F	c	15 F	8.29	16 F	c
21463	10.42	10.28	1 M	9.83	2 M	10.92	3 M	10.49	4 M	10.44	5 F	10.20	6 F	c	7 F	10.39	8 F	10.84
			9 F	9.69	10 F	c												
21464	6.44	6.60	1 M	7.13	2 M	c	3 M	5.78	4 M	c	5 M	c	6 M	6.49	7 M	6.34	8 M	c
			9 M	c	10 M	c	11 M	c	12 F	6.87	13 F	c	14 F	c	15 F	6.83	16 F	6.51
			17 F	6.19	18 F	c												
21466	12.52	-	1 M	12.89	2 M	12.14	3	M 1										
21467	12.93	12.01	1 M	12.71	2 M	13.72	3 M	12.70	4 M	12.61	5 F	12.47	6 F	11.41	7 F	12.15		
21468	10.54	10.27	1 M	10.15	2 M	c	3 M	10.74	4 M	10.73	5 M	10.55	6 F	10.96	7 F	10.44	8 F	9.94
			9 F	c	10 F	c	11 F	c	12 F	c	13 F	c	14 F	c	15 F	9.75	16 F	c
21469	10.90	10.38	1 M	11.37	2 M	c	3 M	10.93	4 M	10.07	5 M	11.22	6 M	c	7 F	10.45	8 F	10.14
			9 F	10.57	10 F	c	11 F	10.35	12 F	c	13 F	c	14	s 0				
21470	11.47	10.70	1 M	11.40	2 M	11.80	3 M	11.20	4 F	10.50	5 F	11.90	6 F	9.90	7 F	c	8 F	c
			9 F	11.20	10 F	10.00	11 F	c	12	s 0								

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER

F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN		P S	P X WEIGHT	P S	P X WEIGHT	P S	P X WEIGHT	P S	P X WEIGHT	P S	P X WEIGHT	P S	P X WEIGHT	P S	P X WEIGHT	P S	P X WEIGHT
	M	F	U E		U E		U E		U E		U E		U E		U E		U E	
21471	8.43	8.72	1 M	8.09	2 M	8.17	3 M	8.64	4 M	c	5 M	8.83	6 F	c	7 F	8.81	8 F	c
			9 F	c	10 F	9.57	11 F	c	12 F	8.61	13 F	c	14 F	c	15 F	c	16 F	7.88
			17 F	c														
21473	9.49	9.03	1 M	9.44	2 M	9.63	3 M	9.58	4 M	9.33	5 M	c	6 M	c	7 F	9.18	8 F	c
			9 F	9.45	10 F	7.97	11 F	c	12 F	c	13 F	c	14 F	9.52	15 F	c		
21474	10.01	9.48	1 M	c	2 M	c	3 M	c	4 M	c	5 M	10.08	6 M	c	7 M	10.04	8 M	c
			9 M	10.49	10 M	9.45	11 M	c	12 F	8.99	13 F	9.35	14 F	9.51	15 F	10.05	16 F	c
21475	9.04	8.81	1 M	c	2 M	c	3 M	c	4 M	9.02	5 M	c	6 M	c	7 M	8.44	8 M	8.93
			9 M	9.33	10 M	8.69	11 M	9.81	12 F	9.06	13 F	8.56	14	s	0			
21476	10.66	10.39	1 M	10.69	2 M	11.05	3 M	10.72	4 M	c	5 M	10.19	6 F	c	7 F	10.62	8 F	10.72
			9 F	c	10 F	c	11 F	9.91	12 F	10.32								
21477	8.64	8.42	1 M	c	2 M	c	3 M	8.43	4 M	8.24	5 M	c	6 M	c	7 M	c	8 M	8.48
			9 M	9.43	10 F	7.74	11 F	8.40	12 F	7.95	13 F	c	14 F	c	15 F	9.60	16 F	c
MEAN	9.92	9.46																
S.D.	1.44	1.25																
N	25	24																

s= STILLBORN

c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 300.0 PPM

LACTATION DAY: 4 (POST CULL)

LACTATION DAY: 4 (POST COLLE)			P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E	
LITTER	MEAN M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
21478	9.33	9.51	1 M	9.90	2 M	c	3 M	9.06	4 M	10.42	5 M	c	6 M	7.93	7 M	c	8 M	c
			9 F	c	10 F	10.42	11 F	c	12 F	9.79	13 F	8.97	14 F	8.84				
21479	7.14	7.03	1 M	c	2 M	7.14	3 M	c	4 M	7.25	5 M	c	6 M	7.18	7 M	c	8 M	7.01
			9 M	c	10 F	c	11 F	6.67	12 F	7.44	13 F	c	14 F	c	15 F	6.98	16 F	7.02
21480	8.94	8.60	1 M	7.52	2 M	8.27	3 M	10.25	4 M	9.72	5 F	c	6 F	c	7 F	c	8 F	9.21
			9 F	c	10 F	8.54	11 F	8.29	12 F	c	13 F	c	14 F	8.34	15 F	c		
21481	10.13	9.51	1 M	10.24	2 M	9.79	3 M	10.36	4	D 1	5 F	9.27	6 F	9.29	7 F	10.52	8 F	c
			9 F	8.27	10 F	c	11 F	10.19	12 F	c	13 F	c						
21482	14.02	-	1 M	14.18	2 M	13.85	3	C 0										
21483	10.41	8.50	1 M	c	2 M	c	3 M	10.55	4 M	c	5 M	10.36	6 M	10.10	7 M	c	8 M	10.63
			9 F	9.13	10 F	8.50	11 F	7.32	12 F	9.06	13 F	c	14	s 0				
21485	8.98	8.61	1 M	c	2 M	8.89	3 M	8.93	4 M	8.54	5 M	9.56	6 M	c	7 M	c	8 M	c
			9	D 4	10 F	9.13	11 F	7.70	12 F	8.74	13 F	8.85	14 F	c	15	s 0		
21486	11.21	10.86	1 M	11.59	2 M	c	3 M	c	4 M	c	5 M	11.51	6 M	10.10	7 M	11.65	8 M	c
			9 F	c	10 F	11.02	11 F	10.78	12 F	10.99	13 F	c	14 F	10.63				
21487	10.33	10.33	1 M	9.91	2 M	10.00	3 M	10.79	4 M	c	5 M	10.62	6 F	10.44	7 F	9.60	8 F	c
			9 F	10.83	10 F	10.46												
21488	10.54	10.74	1	M 1	2 M	c	3 M	c	4 M	10.56	5 M	9.59	6 M	11.51	7 M	10.50	8 F	11.03
			9 F	c	10 F	c	11 F	10.81	12 F	c	13 F	10.70	14 F	10.42				
21490	10.77	10.92	1 M	11.11	2 M	10.35	3 M	10.85	4 F	11.30	5 F	10.81	6 F	11.30	7 F	c	8 F	c
			9 F	10.93	10 F	c	11 F	c	12 F	10.26								
21491	9.40	8.87	1 M	9.37	2 M	c	3 M	9.00	4 M	10.40	5 M	8.83	6 F	c	7 F	c	8 F	c
			9 F	9.39	10 F	7.16	11 F	c	12 F	8.95	13 F	c	14 F	9.96				
21492	12.50	11.97	1 M	13.10	2 M	12.20	3 M	12.20	4 F	12.90	5 F	11.70	6 F	11.30				
21493	12.34	12.84	1 M	12.16	2 M	12.31	3 M	12.56	4 F	12.58	5 F	13.09	6	D 0	7	s 0	8	C 0
21494	10.31	9.38	1	D 0	2 M	10.54	3 M	c	4 M	10.72	5 M	10.95	6 M	9.04	7 F	9.12	8 F	9.86
			9 F	c	10 F	c	11 F	9.20	12 F	c	13 F	c	14 F	9.34	15	s 0		
21497	10.19	9.58	1 M	9.92	2 M	10.47	3 M	10.47	4 M	9.88	5 F	c	6 F	9.62	7 F	c	8 F	c
			9 F	10.04	10 F	c	11 F	c	12 F	9.00	13 F	9.65						
21498	7.21	7.01	1 M	c	2 M	7.47	3 M	c	4 M	c	5 M	7.39	6 M	6.97	7 M	7.01	8 M	c
			9 M	c	10 F	7.43	11 F	c	12 F	c	13 F	6.59	14 F	6.79	15 F	7.22		
21499	-	10.45	1 F	10.45														
21500	9.28	9.25	1 M	c	2 M	9.91	3 M	c	4 M	c	5 M	9.41	6 M	9.46	7 M	8.36	8	D 0
			9 F	9.56	10 F	9.98	11 F	9.36	12 F	8.11	13	D 0						
21501	9.57	9.56	1 M	9.70	2 M	9.40	3 M	9.60	4 F	c	5 F	c	6 F	9.30	7 F	10.20	8 F	c
			9 F	9.20	10 F	9.20	11 F	c	12 F	9.90	13 F	c	14 F	c	15 F	c	16	s 0
21502	11.30	10.64	1 M	c	2 M	11.33	3 M	c	4 M	c	5 M	11.94	6 M	c	7 M	11.34	8 M	c
			9 M	10.59	10 F	10.16	11 F	10.86	12 F	c	13 F	11.10	14 F	10.45				

D= DEAD, C= CANNIBALIZED, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 300.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN		P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT
	M	F														
21503	9.91	9.67	1 M	10.29	2 M	9.46	3 M	9.56	4 M	10.34	5 F	c 6 F	c 7 F	10.35	8 F	c
			9 F	9.09	10 F	c 11 F	9.34	12 F	c 13 F	9.89	14	D 0 15	s 0			
21504	8.76	7.79	1 M	c	2 M	c 3 M	c 4 M	9.00	5 M	c 6 M	8.12	7 M	c 8 M	9.26		
			9 M	8.65	10 F	7.94	11 F	7.18	12 F	c 13 F	c 14 F	7.65	15 F	c 16 F	8.40	
			17	s 0												
21505	8.61	8.45	1 M	c	2 M	8.38	3 M	8.13	4 M	9.52	5 M	8.39	6 M	c 7 F	c 8 F	c
			9 F	c	10 F	8.87	11 F	c 12 F	7.77	13 F	8.48	14 F	c 15 F	8.69		
MEAN	10.05	9.57														
S.D.	1.59	1.43														
N	23	23														

D= DEAD, s= STILLBORN

c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21506	10.71	10.00	1 M c	2 M c	3 M 10.80	4 M 10.89	5 M 10.34	6 M c	7 M 10.79	8 F 9.40									
			9 F 10.38	10 F 10.23	11 F 9.98														
21507	8.77	8.00	1 M 8.68	2 M c	3 M c	4 M 8.56	5 M 9.03	6 M 8.81	7 M 1	8 F c									
			9 F 8.43	10 F 8.77	11 F c	12 F 8.58	13 F 6.23												
21508	12.76	11.24	1 M 12.76	2 F 11.17	3 F 11.55	4 F 10.65	5 F 11.60												
21510	13.90	13.48	1 M 14.50	2 M 13.30	3 F 13.80	4 F 13.60	5 F 13.40	6 F 13.00	7 F 13.60										
21511	10.35	9.96	1 M 10.65	2 M c	3 M 10.04	4 M 10.67	5 M c	6 M 10.02	7 F c	8 F 9.42									
			9 F c	10 F c	11 F 9.94	12 F 11.00	13 F c	14 F 9.47	15 F c										
21513	9.05	8.75	1 M 9.00	2 M 8.90	3 M c	4 M c	5 M 9.20	6 M c	7 M c	8 M c									
			9 M 9.10	10 F 9.40	11 F 8.80	12 F 8.30	13 F c	14 F c	15 F 8.50										
21514	10.59	11.18	1 M c	2 M c	3 M 10.62	4 M 10.55	5 M c	6 M 10.02	7 M 11.18	8 F c									
			9 F 11.71	10 F 10.96	11 F 10.69	12 F c	13 F 11.37												
21515	10.01	10.20	1 M 10.19	2 M c	3 M 9.21	4 M 10.40	5 M c	6 M c	7 M c	8 M 10.25									
			9 F 9.14	10 F c	11 F c	12 F 10.56	13 F 9.85	14 F 11.24	15 F c	16 s 0									
21516	9.76	9.18	1 M c	2 M 8.68	3 M 10.28	4 M 10.11	5 M 9.96	6 M c	7 F c	8 F c									
			9 F 8.20	10 F 10.47	11 F c	12 F 8.93	13 F 9.10	14 F c											
21517	11.12	9.37	1 M 11.84	2 M 11.05	3 M c	4 M 10.72	5 M 10.86	6 F c	7 F c	8 F 8.51									
			9 F 8.91	10 F c	11 F 9.85	12 F 10.21	13 F c												
21518	10.33	9.53	1 M 11.20	2 M c	3 M c	4 M 10.61	5 M 10.14	6 M 9.38	7 F c	8 F 9.76									
			9 F c	10 F c	11 F c	12 F c	13 F c	14 F 8.71	15 F 10.11	16 F 9.52									
21519	11.38	10.52	1 D 2	2 M c	3 M 10.89	4 M 10.64	5 M c	6 M c	7 M 12.13	8 M 11.86									
			9 M c	10 F c	11 F 11.40	12 F 10.22	13 F 10.68	14 F c	15 F 9.78										
21520	8.11	7.93	1 M 7.53	2 M c	3 M 9.04	4 M 7.68	5 M c	6 M c	7 M 8.19	8 M c									
			9 M c	10 F c	11 F 8.10	12 F c	13 F c	14 F 8.05	15 F 7.89	16 F c									
21521	9.02	8.93	1 M c	2 M 9.50	3 M 8.30	4 M c	5 M 8.90	6 M 9.40	7 M c	8 F 8.80									
			9 F c	10 F c	11 F 9.10	12 F c	13 F c	14 F 9.00	15 F c	16 F 8.80									
21522	9.53	9.99	1 M 10.12	2 M 8.44	3 M 9.08	4 M c	5 M c	6 M 10.48	7 F c	8 F 9.14									
			9 F c	10 F c	11 F 9.88	12 F 10.39	13 F 10.53	14 F c	15 D 0										
21524	9.49	9.06	1 M 9.60	2 M c	3 M 10.18	4 M 8.84	5 M c	6 M c	7 M 9.32	8 F 9.06									
			9 F c	10 F 8.53	11 F c	12 F 9.14	13 F c	14 F 9.51	15 F c	16 F c									
21525	10.36	9.91	1 M c	2 M c	3 M c	4 M 9.16	5 M 10.21	6 M c	7 M c	8 M 11.31									
			9 M 10.75	10 M c	11 F 8.62	12 F 10.01	13 F c	14 F 10.52	15 F c	16 F 10.50									
21526	10.21	10.37	1 M c	2 M 10.79	3 M 9.50	4 M 10.48	5 M c	6 M c	7 M 10.06	8 F 10.40									
			9 F 9.98	10 F c	11 F c	12 F 10.14	13 F 10.97												
21528	9.92	9.76	1 M 10.24	2 M c	3 M 10.04	4 M 10.13	5 M 9.27	6 F c	7 F 9.78	8 F 9.82									
			9 F c	10 F c	11 F 10.35	12 F 9.09	13 F c	14 F c	15 D 0										

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 4 (POST CULL)

LITTER	MEAN		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E	
	M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
21529	10.33	9.68	1 M	c	2 M	10.45	3 M	10.29	4 M	9.96	5 M	c	6 M	c	7 M	c	8 M	10.63		
			9 F	c	10 F	8.50	11 F	9.84	12 F	c	13 F	c	14 F	c	15 F	10.30	16 F	10.08		
21530	11.41	10.22	1 M	c	2 M	c	3 M	11.57	4 M	11.72	5 M	11.18	6 M	c	7 M	11.17	8 F	10.18		
			9 F	10.20	10 F	10.29	11 F	10.22												
21532	10.87	10.14	1 M	11.16	2 M	c	3 M	10.67	4 M	10.79	5 M	c	6 M	c	7 M	10.84	8 F	9.93		
			9 F	10.11	10 F	10.34	11 F	10.18												
21533	13.86	12.64	1 M	13.39	2 M	14.87	3 M	13.32	4 F	14.01	5 F	13.30	6 F	9.11	7 F	14.16				
MEAN	10.51	10.00																		
S.D.	1.45	1.28																		
N	23	23																		

c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 4 (POST CULL)			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 2000.0 PPM															
LITTER	MEAN M	F	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T	P U E P X	S E X W E I G H T
21534	9.90	9.86	1 M	9.88	2 M	9.85	3 M	9.49	4 M	10.38	5 F	c	6 F	10.25	7 F	9.61	8 F	9.88
			9 F	9.71	10 F	c	11 F	c	12 F	c	13 F	c	14 F	c				
21535	10.68	10.25	1 M	11.30	2 M	10.60	3 M	c	4 M	10.20	5 M	10.60	6 F	c	7 F	c	8 F	c
			9 F	c	10 F	c	11 F	10.90	12 F	c	13 F	9.90	14 F	10.20	15 F	10.00	16	D O
			17	s 0	18	s 0												
21536	9.15	8.83	1 M	c	2 M	c	3 M	c	4 M	9.41	5 M	c	6 M	9.43	7 M	c	8 M	8.92
			9 M	8.83	10 F	8.80	11 F	8.88	12 F	8.88	13 F	8.74						
21537	9.00	8.22	1	M 1	2 M	c	3 M	c	4 M	8.73	5 M	9.07	6 M	9.05	7 M	c	8 M	9.17
			9 F	c	10 F	8.88	11 F	c	12 F	8.07	13 F	7.96	14 F	c	15 F	7.97	16	D O
			17	s 0														
21538	8.97	8.47	1 M	9.03	2 M	8.84	3 M	9.09	4 M	c	5 M	c	6 M	c	7 M	c	8 M	8.93
			9 M	c	10 F	c	11 F	8.23	12 F	8.28	13 F	8.61	14 F	8.77	15 F	c		
21540	9.88	9.19	1 M	10.24	2 M	10.07	3 M	c	4 M	c	5 M	c	6 M	9.94	7 M	c	8 M	9.26
			9 M	c	10 M	c	11 M	c	12 F	8.64	13 F	8.73	14 F	9.91	15 F	9.48		
21541	9.02	8.45	1	M 1	2 M	8.96	3 M	c	4 M	c	5 M	9.55	6 M	8.45	7 M	9.12	8 F	8.77
			9 F	8.87	10 F	c	11 F	c	12 F	7.77	13 F	8.39	14 F	c	15 F	c	16 F	c
21542	11.54	10.60	1	M 2	2 M	c	3 M	c	4 M	c	5 M	11.40	6 M	11.00	7 M	c	8 M	11.20
			9 M	12.30	10 M	11.80	11 F	11.60	12 F	8.10	13 F	12.10						
21543	11.08	11.05	1 M	11.22	2 M	c	3 M	10.82	4 M	11.14	5 M	c	6 M	11.15	7 F	10.97	8 F	c
			9 F	11.21	10 F	10.74	11 F	11.26	12	s 0								
21544	9.22	8.43	1 M	9.54	2 M	9.28	3 M	c	4 M	9.37	5 M	c	6 M	c	7 M	c	8 M	c
			9 M	c	10 M	8.68	11	D O	12	D O	13 F	8.77	14 F	c	15 F	7.51	16 F	9.14
			17 F	8.30	18 F	c												
21546	10.56	10.22	1 M	11.03	2 M	c	3 M	10.15	4 M	c	5 M	c	6 M	10.78	7 M	10.28	8 F	10.60
			9 F	9.81	10 F	c	11 F	c	12 F	10.24	13 F	10.22	14 F	c				
21547	11.53	11.15	1 M	11.26	2 M	c	3 M	11.69	4 M	11.70	5 M	12.20	6 M	10.86	7 M	11.50	8 F	10.71
			9 F	11.59	10	s 0												
21548	8.90	8.60	1 M	9.37	2 M	8.62	3 M	8.83	4 M	8.77	5 M	c	6 F	8.38	7 F	9.10	8 F	c
			9 F	8.40	10 F	c	11 F	c	12 F	8.53	13 F	c	14	s 0				
21549	9.80	9.18	1 M	9.42	2 M	9.72	3 M	c	4 M	10.31	5 M	c	6 M	c	7 M	9.69	8 M	c
			9 M	9.85	10 M	c	11 F	9.71	12 F	8.59	13 F	9.24						
21550	11.74	11.21	1 M	11.93	2 M	11.33	3 M	c	4 M	11.92	5 M	11.76	6 F	c	7 F	c	8 F	12.05
			9 F	11.80	10 F	10.82	11 F	c	12 F	10.16								
21551	10.16	9.37	1 M	9.97	2 M	9.74	3 M	10.54	4 M	10.38	5 F	10.05	6 F	9.71	7 F	c	8 F	c
			9 F	8.08	10 F	c	11 F	c	12 F	c	13 F	9.63						
21552	9.75	9.70	1 M	c	2 M	9.40	3 M	c	4 M	10.50	5 M	c	6 M	9.50	7 M	9.60	8 F	c
			9 F	c	10 F	10.00	11 F	c	12 F	c	13 F	9.80	14 F	9.00	15 F	10.00		

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 4 (POST CULL)

LACTATION DAY: 4 (POST COLL)			P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT		P S U E P X WEIGHT					
LITTER	MEAN M	F																		
21553	9.18	8.60	1 M	9.28	2 M	8.71	3 M	9.75	4 M	8.97	5 F	8.65	6 F	c	7 F	c	8 F	c		
			9 F	8.83	10 F	c	11 F	8.50	12 F	8.42	13 F	c	14	s	0					
21554	8.49	8.77	1	M	1	2 M	7.93	3 M	8.48	4 M	8.65	5 M	c	6 M	c	7 M	8.90	8 F	8.66	
			9 F	c	10 F	c	11 F	8.36	12 F	c	13 F	c	14 F	8.64	15 F	9.44				
21555	11.08	11.12	1 M	11.04	2 M	c	3 M	10.42	4 M	c	5 M	11.37	6 M	11.49	7 F	11.74	8 F	c		
			9 F	10.94	10 F	10.69	11 F	c	12 F	c	13 F	11.12								
21556	10.61	10.55	1 M	10.62	2 M	10.73	3 M	10.69	4 M	c	5 M	c	6 M	c	7 M	10.39	8 M	c		
			9 F	c	10 F	10.74	11 F	10.17	12 F	10.82	13 F	c	14 F	10.48						
21557	11.22	10.85	1 M	11.43	2 M	c	3 M	c	4 M	c	5 M	10.84	6 M	11.51	7 M	11.32	8 M	11.01		
			9 F	11.02	10 F	10.56	11 F	10.96	12	s	0									
21558	13.67	12.45	1 M	14.40	2 M	13.50	3 M	14.30	4 M	12.50	5 F	12.60	6 F	12.30						
21559	7.55	7.46	1	D	1	2 M	c	3 M	7.87	4 M	8.15	5 M	7.08	6 M	7.12	7	D	2	8 F	c
			9 F	c	10 F	8.18	11 F	c	12 F	7.32	13 F	7.64	14 F	6.70	15	D	0	16	s	0
21561	11.27	11.04	1 M	11.18	2 M	11.50	3 M	11.12	4	D	0	5 F	c	6 F	10.78	7 F	c	8 F	11.13	
			9 F	c	10 F	11.49	11 F	11.26	12 F	c	13 F	10.55								
MEAN	10.16	9.74																		
S.D.	1.32	1.25																		
N	25	25																		

D= DEAD, M= MISSING, s= STILLBORN  
c= PUP CULLED AND WEIGHT NOT INCLUDED IN MEANS.

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 7

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21450	14.55	15.81	1 M	13.38	2 M	15.77	3 M	13.39	4 M	15.66	5 F	14.54	6 F	15.82	7 F	14.00	8 F	18.87
21451	14.98	14.32	1 M	14.74	2 M	14.53	3 M	15.14	4 M	15.50	5 F	15.06	6 F	12.27	7 F	15.45	8 F	14.50
21452	15.17	15.50	1 M	15.40	2 M	16.40	3 M	16.00	4 M	12.90	5 F	15.70	6 F	15.90	7 F	15.30	8 F	15.10
21453	15.85	14.45	1 M	16.00	2 M	15.30	3 M	16.60	4 M	15.50	5 F	13.30	6 F	12.80	7 F	14.80	8 F	16.90
21454	15.31	15.03	1 M	15.65	2 M	15.80	3 M	13.94	4 M	15.87	5 F	14.92	6 F	15.10	7 F	15.09	8 F	15.01
21455	15.90	15.85	1 M	16.30	2 M	16.40	3 M	15.60	4 M	15.30	5 F	16.50	6 F	15.20	7 F	16.10	8 F	15.60
21456	14.90	14.38	1 M	14.92	2 M	14.20	3 M	14.92	4 M	15.56	5 F	15.12	6 F	14.78	7 F	14.12	8 F	13.49
21458	18.54	16.46	1 M	19.47	2 M	18.56	3 M	18.29	4 M	17.83	5 F	15.60	6 F	16.84	7 F	17.30	8 F	16.10
21459	15.62	15.52	1 M	15.43	2 M	15.80	3 F	15.41	4 F	15.72	5 F	15.44	6 F	16.35	7 F	15.27	8 F	14.93
21460	15.34	14.18	1 M	15.59	2 M	15.40	3 M	16.14	4 M	14.23	5 F	14.30	6 F	14.02	7 F	13.58	8 F	14.82
21461	16.63	17.52	1 M	16.79	2 M	15.64	3 M	17.46	4 F	17.10	5 F	17.94						
21462	14.63	13.78	1 M	13.43	2 M	14.53	3 M	15.93	4 M	14.64	5 F	13.40	6 F	14.21	7 F	13.69	8 F	13.83
21463	16.40	16.08	1 M	16.15	2 M	17.14	3 M	16.75	4 M	15.56	5 F	15.27	6 F	16.03	7 F	16.01	8 F	17.01
21464	10.97	12.01	1 M	10.81	2 M	12.82	3 M	11.07	4 M	9.18	5 F	11.17	6 F	12.64	7 F	12.20	8 F	12.02
21466	16.85	-	1 M	17.33	2 M	16.36												
21467	19.60	18.47	1 M	19.30	2 M	19.80	3 M	20.40	4 M	18.90	5 F	18.90	6 F	17.40	7 F	19.10		
21468	17.05	16.68	1 M	17.56	2 M	17.11	3 M	17.25	4 M	16.30	5 F	17.94	6 F	15.48	7 F	16.30	8 F	17.01
21469	18.82	17.82	1 M	19.99	2 M	16.91	3 M	18.91	4 M	19.48	5 F	17.94	6 F	18.50	7 F	17.09	8 F	17.73
21470	17.61	16.48	1 M	17.32	2 M	17.32	3 M	18.19	4 F	15.41	5 F	18.06	6 F	16.27	7 F	16.93	8 F	15.72
21471	13.88	14.65	1 M	13.30	2 M	14.60	3 M	13.00	4 M	14.60	5 F	14.10	6 F	15.80	7 F	15.20	8 F	13.50
21473	16.07	15.43	1 M	16.48	2 M	16.24	3 M	16.20	4 M	15.35	5 F	16.36	6 F	16.08	7 F	13.86	8 F	15.44
21474	16.76	16.30	1 M	17.60	2 M	16.65	3 M	16.81	4 M	16.00	5 F	16.40	6 F	15.95	7 F	15.74	8 F	17.13
21475	15.17	14.69	1 M	15.11	2 M	14.51	3 M	15.76	4 M	14.48	5 M	14.78	6 M	16.36	7 F	14.21	8 F	15.17
21476	17.35	16.65	1 M	17.60	2 M	17.90	3 M	17.30	4 M	16.60	5 F	17.70	6 F	15.40	7 F	17.40	8 F	16.10
21477	14.23	13.60	1 M	13.24	2 M	16.01	3 M	14.12	4 M	13.56	5 F	15.02	6 F	13.64	7 F	12.60	8 F	13.12
MEAN	15.93	15.49																
S.D.	1.78	1.47																
N	25	24																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 300.0 PPM

LACTATION DAY: 7

LITTER	MEAN		P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT
	M	F																
21478	14.97	15.40	1 M	15.90	2 M	12.60	3 M	16.90	4 M	14.50	5 F	14.60	6 F	16.10	7 F	16.30	8 F	14.60
21479	12.31	12.01	1 M	12.97	2 M	12.21	3 M	12.21	4 M	11.86	5 F	12.45	6 F	11.22	7 F	11.64	8 F	12.74
21480	15.12	14.28	1 M	16.80	2 M	16.30	3 M	14.00	4 M	13.40	5 F	14.50	6 F	13.60	7 F	13.80	8 F	15.20
21481	15.68	14.70	1 M	15.37	2 M	15.49	3 M	16.18	4 F	14.35	5 F	14.17	6 F	16.25	7 F	13.10	8 F	15.62
21482	19.63	-	1 M	19.40	2 M	19.86												
21483	15.75	14.27	1 M	16.10	2 M	15.83	3 M	15.62	4 M	15.44	5 F	M 5	6 F	14.59	7 F	13.76	8 F	14.45
21485	14.18	14.07	1 M	15.35	2 M	13.50	3 M	13.68	4 M	14.20	5 F	14.46	6 F	14.53	7 F	14.86	8 F	12.42
21486	18.25	17.64	1 M	18.92	2 M	18.79	3 M	16.53	4 M	18.74	5 F	18.35	6 F	17.55	7 F	17.56	8 F	17.11
21487	17.54	17.16	1 M	17.72	2 M	18.39	3 M	17.03	4 M	17.01	5 F	17.25	6 F	17.91	7 F	17.48	8 F	16.00
21488	16.34	16.94	1 M	14.34	2 M	16.78	3 M	16.73	4 M	17.50	5 F	16.69	6 F	17.43	7 F	16.45	8 F	17.20
21490	17.73	17.80	1 M	18.10	2 M	18.20	3 M	16.90	4 F	18.10	5 F	18.00	6 F	18.40	7 F	17.60	8 F	16.90
21491	15.62	14.76	1 M	17.27	2 M	15.61	3 M	14.73	4 M	14.87	5 F	16.50	6 F	16.00	7 F	14.44	8 F	12.10
21492	17.44	16.65	1 M	17.13	2 M	17.84	3 M	17.36	4 F	18.12	5 F	15.90	6 F	15.92				
21493	18.79	19.53	1 M	18.69	2 M	18.89	3 M	18.79	4 F	18.96	5 F	20.10						
21494	16.64	15.02	1 M	16.26	2 M	17.28	3 M	15.22	4 M	17.78	5 F	14.62	6 F	15.57	7 F	14.53	8 F	15.36
21497	16.54	15.68	1 M	16.26	2 M	15.64	3 M	16.95	4 M	17.29	5 F	15.61	6 F	16.09	7 F	15.96	8 F	15.08
21498	12.70	12.43	1 M	12.47	2 M	12.76	3 M	13.33	4 M	12.24	5 F	12.97	6 F	11.79	7 F	13.43	8 F	11.53
21499	-	11.40	1 F	11.40														
21500	14.08	13.95	1 M	14.00	2 M	14.80	3 M	12.80	4 M	14.70	5 F	14.40	6 F	14.30	7 F	12.40	8 F	14.70
21501	14.84	14.98	1 M	15.29	2 M	14.67	3 M	14.56	4 F	14.31	5 F	14.50	6 F	15.22	7 F	14.87	8 F	16.00
21502	18.61	17.56	1 M	16.84	2 M	19.76	3 M	19.63	4 M	18.20	5 F	18.61	6 F	18.35	7 F	17.16	8 F	16.12
21503	15.59	15.00	1 M	14.66	2 M	15.85	3 M	15.26	4 M	16.58	5 F	15.32	6 F	14.00	7 F	14.63	8 F	16.04
21504	15.35	14.02	1 M	15.32	2 M	16.55	3 M	14.01	4 M	15.54	5 F	14.87	6 F	13.65	7 F	13.23	8 F	14.35
21505	14.53	13.96	1 M	14.44	2 M	14.26	3 M	14.52	4 M	14.90	5 F	14.09	6 F	13.26	7 F	14.22	8 F	14.28
MEAN	16.01	15.18																
S.D.	1.89	1.98																
N	23	23																

M= MISSING

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 7

LITTER	MEAN		P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT
	M	F																
21506	16.80	16.25	1 M	16.10	2 M	17.30	3 M	16.50	4 M	17.30	5 F	16.70	6 F	16.70	7 F	15.60	8 F	16.00
21507	13.56	12.33	1 M	13.38	2 M	13.82	3 M	13.79	4 M	13.25	5 F	13.43	6 F	12.96	7 F	9.91	8 F	13.03
21508	18.40	17.08	1 M	18.40	2 F	17.10	3 F	17.50	4 F	16.50	5 F	17.20						
21510	19.08	18.41	1 M	19.95	2 M	18.20	3 F	18.55	4 F	18.72	5 F	18.24	6 F	18.70	7 F	17.84		
21511	16.72	16.25	1 M	16.62	2 M	17.24	3 M	16.23	4 M	16.79	5 F	16.01	6 F	15.21	7 F	17.87	8 F	15.92
21513	14.95	14.12	1 M	15.79	2 M	14.22	3 M	15.19	4 M	14.59	5 F	13.28	6 F	13.61	7 F	14.71	8 F	14.89
21514	17.23	17.85	1 M	17.06	2 M	17.43	3 M	17.88	4 M	16.55	5 F	17.22	6 F	17.27	7 F	17.98	8 F	18.92
21515	16.83	17.02	1 M	15.69	2 M	16.76	3 M	17.71	4 M	17.17	5 F	17.22	6 F	15.83	7 F	18.20	8 F	16.83
21516	17.06	15.97	1 M	18.03	2 M	17.56	3 M	16.56	4 M	16.08	5 F	14.79	6 F	16.26	7 F	17.73	8 F	15.10
21517	18.71	16.10	1 M	17.74	2 M	19.97	3 M	19.38	4 M	17.76	5 F	14.75	6 F	17.84	7 F	15.24	8 F	16.56
21518	16.19	15.26	1 M	15.72	2 M	17.74	3 M	16.24	4 M	15.05	5 F	15.44	6 F	14.33	7 F	16.04	8 F	15.22
21519	17.70	16.82	1 M	19.00	2 M	18.19	3 M	16.07	4 M	17.56	5 F	16.82	6 F	17.95	7 F	16.36	8 F	16.14
21520	12.50	12.91	1 M	14.98	2 M	12.72	3 M	12.12	4 M	10.20	5 F	13.10	6 F	13.21	7 F	12.65	8 F	12.68
21521	14.18	13.58	1 M	15.06	2 M	14.57	3 M	13.22	4 M	13.87	5 F	13.30	6 F	13.24	7 F	14.33	8 F	13.43
21522	15.57	15.74	1 M	16.97	2 M	15.02	3 M	15.51	4 M	14.76	5 F	16.53	6 F	16.66	7 F	15.71	8 F	14.05
21524	15.17	15.31	1 M	15.33	2 M	13.73	3 M	16.61	4 M	15.03	5 F	15.19	6 F	15.66	7 F	14.44	8 F	15.97
21525	17.24	16.33	1 M	17.65	2 M	17.05	3 M	18.03	4 M	16.25	5 F	17.01	6 F	14.82	7 F	17.02	8 F	16.46
21526	17.22	17.29	1 M	16.77	2 M	17.87	3 M	16.26	4 M	17.99	5 F	18.22	6 F	16.63	7 F	16.84	8 F	17.49
21528	16.38	16.02	1 M	16.90	2 M	17.00	3 M	15.50	4 M	16.10	5 F	14.90	6 F	15.70	7 F	16.80	8 F	16.70
21529	16.78	15.31	1 M	16.72	2 M	17.34	3 M	16.81	4 M	16.24	5 F	16.28	6 F	16.06	7 F	14.73	8 F	14.18
21530	18.22	16.38	1 M	18.00	2 M	18.30	3 M	18.20	4 M	18.40	5 F	16.20	6 F	16.40	7 F	16.60	8 F	16.30
21532	16.05	15.19	1 M	16.44	2 M	15.68	3 M	15.89	4 M	16.18	5 F	15.52	6 F	15.10	7 F	14.94	8 F	15.19
21533	19.57	18.00	1 M	18.90	2 M	19.32	3 M	20.48	4 F	18.38	5 F	13.85	6 F	19.99	7 F	19.78		
MEAN	16.61	15.89																
S.D.	1.74	1.54																
N	23	23																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 7

LACTATION DAY: 7			P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E	
LITTER	MEAN M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
21534	16.90	16.67	1 M	17.00	2 M	16.20	3 M	17.50	4 M	16.90	5 F	16.40	6 F	17.30	7 F	16.30
21535	17.25	16.49	1 M	17.14	2 M	17.84	3 M	16.84	4 M	17.18	5 F	16.12	6 F	17.53	7 F	15.98
21536	14.24	13.79	1 M	14.32	2 M	13.37	3 M	14.61	4 M	14.68	5 F	13.99	6 F	13.55	7 F	13.66
21537	15.06	14.01	1 M	14.58	2 M	14.94	3 M	15.22	4 M	15.50	5 F	13.96	6 F	13.94	7 F	14.92
21538	14.96	13.76	1 M	14.90	2 M	15.10	3 M	15.19	4 M	14.65	5 F	13.71	6 F	13.56	7 F	14.84
21540	16.05	15.11	1 M	15.95	2 M	16.75	3 M	15.22	4 M	16.30	5 F	14.37	6 F	15.44	7 F	14.80
21541	14.23	13.65	1 M	14.30	2 M	14.20	3 M	15.10	4 M	13.30	5 F	14.20	6 F	12.70	7 F	13.60
21542	18.12	16.49	1 M	18.00	2 M	17.88	3 M	17.76	4 M	17.96	5 M	19.02	6 F	18.82	7 F	17.83
21543	17.22	17.18	1 M	17.30	2 M	17.30	3 M	17.10	4 M	17.20	5 F	17.10	6 F	17.10	7 F	16.90
21544	14.27	13.28	1 M	14.86	2 M	13.64	3 M	14.90	4 M	13.69	5 F	13.01	6 F	14.02	7 F	14.06
21546	17.23	16.55	1 M	17.48	2 M	16.91	3 M	16.96	4 M	17.58	5 F	16.61	6 F	17.31	7 F	16.27
21547	17.08	16.40	1 M	16.50	2 M	17.80	3 M	17.20	4 M	16.60	5 M	17.70	6 M	16.70	7 F	15.60
21548	14.68	14.26	1 M	14.50	2 M	14.38	3 M	15.67	4 M	14.16	5 F	14.70	6 F	13.73	7 F	14.39
21549	15.38	14.67	1 M	15.40	2 M	15.50	3 M	14.50	4 M	16.30	5 M	15.20	6 F	13.90	7 F	15.40
21550	18.43	17.74	1 M	18.35	2 M	17.87	3 M	18.83	4 M	18.68	5 F	15.74	6 F	18.45	7 F	17.60
21551	16.10	14.89	1 M	16.83	2 M	16.55	3 M	15.24	4 M	15.77	5 F	15.30	6 F	13.03	7 F	15.75
21552	15.83	15.56	1 M	15.28	2 M	15.51	3 M	16.95	4 M	15.57	5 F	14.75	6 F	15.69	7 F	15.87
21553	15.13	14.20	1 M	14.40	2 M	15.00	3 M	15.80	4 M	15.30	5 F	14.40	6 F	14.10	7 F	13.90
21554	13.80	14.11	1 M	12.84	2 M	13.85	3 M	14.29	4 M	14.21	5 F	14.23	6 F	14.10	7 F	14.74
21555	17.28	17.46	1 M	15.91	2 M	17.92	3 M	18.11	4 M	17.18	5 F	19.37	6 F	17.35	7 F	16.90
21556	17.21	17.08	1 M	16.81	2 M	17.70	3 M	17.29	4 M	17.04	5 F	17.32	6 F	17.19	7 F	16.40
21557	17.65	16.90	1 M	18.24	2 M	17.87	3 M	17.29	4 M	17.54	5 M	17.30	6 F	17.55	7 F	16.25
21558	19.48	18.36	1 M	20.48	2 M	19.75	3 M	19.50	4 M	18.21	5 F	18.20	6 F	18.51		
21559	11.18	11.24	1 M	10.93	2 M	11.40	3 M	10.53	4 M	11.88	5 F	11.88	6 F	11.74	7 F	11.48
21561	17.25	16.72	1 M	17.81	2 M	17.55	3 M	16.38	4 F	16.63	5 F	16.93	6 F	16.73	7 F	16.14
MEAN	16.08	15.46														
S.D.	1.81	1.73														
N	25	25														

TABLE 7

TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 14

LITTER	MEAN		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E		P S U E	
	M	F	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT	P X	WEIGHT
21450	26.75	27.86	1 M	29.89	2 M	25.28	3 M	27.96	4 M	23.86	5 F	29.72	6 F	27.85	7 F	25.73	8 F	28.15
21451	31.43	29.86	1 M	32.12	2 M	31.78	3 M	30.43	4 M	31.41	5 F	27.37	6 F	29.66	7 F	31.42	8 F	30.97
21452	26.79	27.99	1 M	23.25	2 M	28.46	3 M	27.35	4 M	28.09	5 F	27.49	6 F	27.90	7 F	28.60	8 F	27.96
21453	31.23	29.47	1 M	30.56	2 M	32.28	3 M	31.72	4 M	30.36	5 F	29.46	6 F	32.21	7 F	28.20	8 F	28.02
21454	34.23	32.11	1 M	32.49	2 M	35.51	3 M	35.77	4 M	33.16	5 F	32.42	6 F	32.56	7 F	31.86	8 F	31.60
21455	33.04	32.97	1 M	31.08	2 M	33.34	3 M	34.85	4 M	32.88	5 F	31.04	6 F	33.78	7 F	33.02	8 F	34.03
21456	28.98	27.95	1 M	28.54	2 M	29.32	3 M	28.51	4 M	29.55	5 F	26.88	6 F	28.12	7 F	27.40	8 F	29.40
21458	31.80	30.75	1 M	35.08	2 M	33.40	3 M	22.97	4 M	35.76	5 F	31.31	6 F	29.07	7 F	31.31	8 F	31.30
21459	28.98	28.39	1 M	28.84	2 M	29.12	3 F	30.59	4 F	28.46	5 F	29.03	6 F	28.15	7 F	26.25	8 F	27.85
21460	29.44	26.71	1 M	29.55	2 M	30.06	3 M	29.44	4 M	28.73	5 F	26.33	6 F	26.64	7 F	27.79	8 F	26.09
21461	32.38	32.52	1 M	33.27	2 M	31.63	3 M	32.23	4 F	32.94	5 F	32.10						
21462	29.01	27.95	1 M	29.10	2 M	28.39	3 M	30.62	4 M	27.92	5 F	26.35	6 F	28.00	7 F	28.76	8 F	28.69
21463	26.92	27.50	1 M	26.49	2 M	25.44	3 M	26.34	4 M	29.40	5 F	27.56	6 F	28.11	7 F	28.06	8 F	26.26
21464	26.69	27.06	1 M	27.15	2 M	29.21	3 M	23.62	4 M	26.78	5 F	25.12	6 F	27.12	7 F	28.09	8 F	27.92
21466	25.68	-	1 M	25.99	2 M	25.36												
21467	37.66	35.41	1 M	38.42	2 M	38.11	3 M	35.22	4 M	38.91	5 F	35.60	6 F	35.95	7 F	34.68		
21468	28.55	29.06	1 M	27.47	2 M	28.85	3 M	28.60	4 M	29.26	5 F	29.75	6 F	27.98	7 F	30.54	8 F	27.97
21469	34.77	32.99	1 M	38.65	2 M	33.56	3 M	33.49	4 M	33.39	5 F	33.06	6 F	32.09	7 F	34.03	8 F	32.79
21470	32.21	31.67	1 M	30.40	2 M	33.94	3 M	32.30	4 F	32.56	5 F	30.93	6 F	30.94	7 F	31.95	8 F	31.96
21471	28.08	29.24	1 M	28.16	2 M	26.53	3 M	30.94	4 M	26.70	5 F	30.51	6 F	25.93	7 F	31.11	8 F	29.41
21473	32.96	31.54	1 M	32.26	2 M	33.44	3 M	32.18	4 M	33.98	5 F	33.32	6 F	31.86	7 F	31.27	8 F	29.71
21474	33.03	31.41	1 M	34.37	2 M	32.67	3 M	31.60	4 M	33.48	5 F	31.13	6 F	31.67	7 F	31.09	8 F	31.75
21475	29.66	28.64	1 M	30.94	2 M	28.66	3 M	29.72	4 M	29.36	5 M	30.89	6 M	28.39	7 F	27.99	8 F	29.30
21476	32.49	32.30	1 M	33.47	2 M	32.57	3 M	31.60	4 M	32.31	5 F	32.94	6 F	32.09	7 F	31.98	8 F	32.19
21477	32.64	30.70	1 M	32.41	2 M	28.89	3 M	36.27	4 M	33.00	5 F	33.31	6 F	30.58	7 F	31.46	8 F	27.43
MEAN	30.62	30.09																
S.D.	3.01	2.28																
N	25	24																



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

LACTATION DAY: 14			INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER F2 PUPS GROUP: 300.0 PPM															
LITTER	MEAN M	F	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT	P U E P X	S E W EIGHT
21478	26.32	28.23	1 M	26.67	2 M	21.37	3 M	27.37	4 M	29.86	5 F	29.13	6 F	29.69	7 F	28.00	8 F	26.10
21479	28.91	28.00	1 M	29.04	2 M	30.58	3 M	27.33	4 M	28.69	5 F	26.30	6 F	28.59	7 F	28.40	8 F	28.71
21480	31.17	29.07	1 M	33.66	2 M	28.08	3 M	30.00	4 M	32.96	5 F	31.28	6 F	27.80	7 F	27.63	8 F	29.59
21481	29.43	28.50	1 M	28.55	2 M	29.71	3 M	30.04	4 F	27.59	5 F	29.75	6 F	29.99	7 F	26.45	8 F	28.74
21482	34.52	-	1 M	34.85	2 M	34.19												
21483	32.98	30.10	1 M	32.18	2 M	32.51	3 M	33.35	4 M	33.88	5 F	M 5	6 F	30.74	7 F	29.01	8 F	30.54
21485	25.98	25.80	1 M	24.76	2 M	27.53	3 M	27.83	4 M	23.81	5 F	27.49	6 F	26.85	7 F	23.53	8 F	25.32
21486	34.04	31.86	1 M	36.26	2 M	27.81	3 M	35.03	4 M	37.07	5 F	32.42	6 F	30.62	7 F	32.76	8 F	31.65
21487	31.55	29.48	1 M	32.52	2 M	31.91	3 M	32.57	4 M	29.21	5 F	29.67	6 F	28.96	7 F	28.79	8 F	30.51
21488	30.81	31.12	1 M	32.01	2 M	32.28	3 M	33.05	4 M	25.91	5 F	30.87	6 F	31.76	7 F	30.96	8 F	30.89
21490	33.43	33.20	1 M	34.69	2 M	31.75	3 M	33.84	4 F	32.08	5 F	32.67	6 F	33.89	7 F	33.04	8 F	34.30
21491	30.80	28.99	1 M	33.40	2 M	29.45	3 M	31.49	4 M	28.86	5 F	29.13	6 F	30.28	7 F	29.79	8 F	26.74
21492	28.80	28.35	1 M	28.78	2 M	28.17	3 M	29.45	4 F	28.74	5 F	28.12	6 F	28.19				
21493	34.75	34.46	1 M	35.22	2 M	34.45	3 M	34.57	4 F	34.53	5 F	34.39						
21494	32.95	30.22	1 M	31.66	2 M	33.71	3 M	34.43	4 M	32.00	5 F	30.65	6 F	28.65	7 F	31.17	8 F	30.41
21497	26.68	26.62	1 M	25.04	2 M	28.72	3 M	25.96	4 M	26.99	5 F	28.11	6 F	26.74	7 F	26.25	8 F	25.38
21498	27.28	26.43	1 M	26.89	2 M	28.26	3 M	27.38	4 M	26.61	5 F	25.41	6 F	27.42	7 F	27.53	8 F	25.34
21499	-	16.23	1 F	16.23														
21500	27.57	27.38	1 M	26.05	2 M	26.78	3 M	28.97	4 M	28.49	5 F	27.24	6 F	29.27	7 F	28.63	8 F	24.39
21501	31.09	30.91	1 M	30.68	2 M	30.83	3 M	31.75	4 F	32.66	5 F	29.37	6 F	30.25	7 F	31.58	8 F	30.67
21502	37.50	34.55	1 M	39.13	2 M	35.71	3 M	35.90	4 M	39.25	5 F	33.46	6 F	34.56	7 F	36.79	8 F	33.40
21503	29.17	27.67	1 M	29.11	2 M	27.36	3 M	30.00	4 M	30.20	5 F	28.91	6 F	25.60	7 F	28.15	8 F	28.01
21504	25.90	24.35	1 M	25.08	2 M	25.38	3 M	24.62	4 M	28.52	5 F	26.01	6 F	25.15	7 F	24.61	8 F	21.61
21505	29.39	27.47	1 M	29.37	2 M	29.44	3 M	29.48	4 M	29.28	5 F	26.80	6 F	28.74	7 F	27.63	8 F	26.72
MEAN	30.48	28.65																
S.D.	3.17	3.76																
N	23	23																

M= MISSING

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 14

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X	U E	P X
21506	29.04	28.64	1 M	30.42	2 M	28.03	3 M	29.45	4 M	28.26	5 F	27.28	6 F	27.74	7 F	29.92	8 F	29.64
21507	25.73	23.82	1 M	25.35	2 M	24.86	3 M	26.52	4 M	26.18	5 F	19.19	6 F	25.34	7 F	24.87	8 F	25.88
21508	34.10	32.86	1 M	34.10	2 F	33.65	3 F	31.94	4 F	31.61	5 F	34.22						
21510	32.15	31.43	1 M	33.25	2 M	31.05	3 F	31.86	4 F	30.60	5 F	31.01	6 F	31.65	7 F	32.05		
21511	31.12	30.32	1 M	29.89	2 M	32.17	3 M	30.54	4 M	31.90	5 F	32.24	6 F	28.87	7 F	30.16	8 F	30.00
21513	29.16	28.38	1 M	30.61	2 M	28.59	3 M	30.73	4 M	26.72	5 F	28.80	6 F	27.76	7 F	28.04	8 F	28.92
21514	31.68	31.37	1 M	31.50	2 M	30.51	3 M	32.96	4 M	31.74	5 F	32.18	6 F	31.20	7 F	30.79	8 F	31.31
21515	33.61	32.26	1 M	33.11	2 M	35.45	3 M	31.52	4 M	34.35	5 F	30.99	6 F	31.73	7 F	34.55	8 F	31.79
21516	33.21	31.60	1 M	32.85	2 M	33.68	3 M	34.83	4 M	31.49	5 F	32.60	6 F	34.02	7 F	31.30	8 F	28.48
21517	33.73	30.34	1 M	34.34	2 M	33.41	3 M	34.56	4 M	32.61	5 F	28.68	6 F	31.01	7 F	29.39	8 F	32.29
21518	30.84	28.53	1 M	30.63	2 M	31.73	3 M	28.78	4 M	32.22	5 F	27.98	6 F	29.11	7 F	29.31	8 F	27.74
21519	37.61	37.08	1 M	36.39	2 M	37.49	3 M	38.65	4 M	37.89	5 F	38.12	6 F	36.19	7 F	36.67	8 F	37.34
21520	28.82	29.06	1 M	32.91	2 M	28.03	3 M	28.38	4 M	25.95	5 F	28.68	6 F	30.23	7 F	29.12	8 F	28.22
21521	28.83	26.98	1 M	30.33	2 M	29.93	3 M	27.26	4 M	27.78	5 F	28.82	6 F	25.43	7 F	26.81	8 F	26.86
21522	30.28	30.28	1 M	33.41	2 M	29.79	3 M	27.44	4 M	30.49	5 F	28.92	6 F	30.93	7 F	29.92	8 F	31.36
21524	29.91	30.72	1 M	30.14	2 M	29.99	3 M	32.88	4 M	26.64	5 F	30.22	6 F	30.12	7 F	31.32	8 F	31.22
21525	28.81	28.56	1 M	28.27	2 M	30.10	3 M	29.68	4 M	27.17	5 F	26.95	6 F	27.72	7 F	29.57	8 F	30.01
21526	36.60	35.60	1 M	35.17	2 M	35.97	3 M	36.92	4 M	38.33	5 F	36.31	6 F	36.14	7 F	34.73	8 F	35.20
21528	30.96	30.22	1 M	31.36	2 M	31.64	3 M	30.28	4 M	30.57	5 F	31.36	6 F	29.97	7 F	30.39	8 F	29.15
21529	33.43	29.77	1 M	33.52	2 M	33.62	3 M	32.11	4 M	34.46	5 F	32.11	6 F	32.73	7 F	25.61	8 F	28.62
21530	33.15	30.66	1 M	32.76	2 M	33.36	3 M	33.63	4 M	32.83	5 F	30.19	6 F	30.36	7 F	31.25	8 F	30.83
21532	28.76	27.30	1 M	29.16	2 M	27.95	3 M	28.95	4 M	28.98	5 F	27.62	6 F	27.24	7 F	27.44	8 F	26.90
21533	33.76	32.14	1 M	33.06	2 M	33.94	3 M	34.29	4 F	33.94	5 F	32.50	6 F	28.17	7 F	33.97		
MEAN	31.53	30.34																
S.D.	2.81	2.77																
N	23	23																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 14

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21534	32.03	31.22	1 M	30.77	2 M	32.11	3 M	32.77	4 M	32.45	5 F	32.26	6 F	30.33	7 F	30.85	8 F	31.45
21535	31.75	30.49	1 M	32.67	2 M	32.03	3 M	30.11	4 M	32.18	5 F	28.04	6 F	29.15	7 F	33.00	8 F	31.76
21536	26.77	25.45	1 M	27.62	2 M	27.27	3 M	25.35	4 M	26.82	5 F	24.81	6 F	26.08	7 F	26.12	8 F	24.79
21537	29.99	28.01	1 M	31.01	2 M	30.82	3 M	28.37	4 M	29.74	5 F	27.17	6 F	27.27	7 F	28.10	8 F	29.51
21538	25.75	24.62	1 M	25.10	2 M	26.04	3 M	25.91	4 M	25.95	5 F	23.92	6 F	24.58	7 F	26.76	8 F	23.20
21540	26.22	24.33	1 M	25.49	2 M	26.11	3 M	26.08	4 M	27.19	5 F	23.94	6 F	24.36	7 F	24.67	8 F	24.36
21541	29.33	27.29	1 M	28.49	2 M	29.73	3 M	29.09	4 M	30.02	5 F	27.42	6 F	28.18	7 F	26.81	8 F	26.75
21542	32.37	30.49	1 M	31.84	2 M	31.99	3 M	31.85	4 M	32.79	5 M	33.39	6 F	32.00	7 F	33.53	8 F	25.95
21543	33.59	32.72	1 M	33.97	2 M	33.89	3 M	32.77	4 M	33.71	5 F	31.57	6 F	32.52	7 F	33.43	8 F	33.35
21544	28.05	26.65	1 M	28.06	2 M	28.74	3 M	28.22	4 M	27.20	5 F	25.49	6 F	27.68	7 F	27.91	8 F	25.51
21546	36.94	34.93	1 M	37.13	2 M	37.21	3 M	37.50	4 M	35.91	5 F	34.44	6 F	35.26	7 F	34.94	8 F	35.10
21547	33.81	32.51	1 M	33.39	2 M	33.30	3 M	35.13	4 M	33.36	5 M	34.53	6 M	33.13	7 F	31.90	8 F	33.12
21548	29.55	28.84	1 M	28.93	2 M	31.66	3 M	28.67	4 M	28.94	5 F	29.48	6 F	28.56	7 F	29.77	8 F	27.54
21549	28.99	28.49	1 M	28.39	2 M	29.98	3 M	25.97	4 M	30.05	5 M	30.58	6 F	28.99	7 F	29.11	8 F	27.36
21550	32.39	31.20	1 M	32.52	2 M	32.03	3 M	31.74	4 M	33.29	5 F	27.65	6 F	31.69	7 F	33.54	8 F	31.92
21551	31.76	29.49	1 M	31.80	2 M	30.91	3 M	32.96	4 M	31.37	5 F	30.23	6 F	28.06	7 F	29.50	8 F	30.19
21552	31.31	30.85	1 M	31.98	2 M	30.54	3 M	30.16	4 M	32.57	5 F	30.59	6 F	29.53	7 F	31.76	8 F	31.51
21553	29.68	28.40	1 M	30.06	2 M	28.85	3 M	30.76	4 M	29.07	5 F	27.49	6 F	28.76	7 F	28.86	8 F	28.48
21554	27.82	27.78	1 M	28.13	2 M	26.77	3 M	27.99	4 M	28.41	5 F	27.64	6 F	29.63	7 F	26.34	8 F	27.50
21555	29.72	29.66	1 M	31.98	2 M	29.45	3 M	30.27	4 M	27.18	5 F	29.66	6 F	29.15	7 F	29.87	8 F	29.98
21556	32.44	32.49	1 M	33.73	2 M	33.07	3 M	31.67	4 M	31.29	5 F	32.51	6 F	31.79	7 F	32.84	8 F	32.81
21557	35.62	35.10	1 M	36.38	2 M	34.94	3 M	35.23	4 M	36.42	5 M	35.11	6 F	36.11	7 F	35.05	8 F	34.13
21558	36.76	35.78	1 M	36.33	2 M	37.68	3 M	37.02	4 M	36.01	5 F	35.47	6 F	36.08				
21559	15.98	16.45	1 M	15.98	2 M	16.80	3 M	15.01	4 M	16.12	5 F	15.68	6 F	15.80	7 F	17.27	8 F	17.03
21561	33.00	31.19	1 M	31.73	2 M	34.58	3 M	32.68	4 F	30.84	5 F	30.65	6 F	31.25	7 F	31.10	8 F	32.09
MEAN	30.46	29.38																
S.D.	4.26	4.08																
N	25	25																

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 21

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21450	42.63	46.24	1 M	46.74	2 M	38.62	3 M	37.64	4 M	47.51	5 F	46.18	6 F	42.22	7 F	46.34	8 F	50.23
21451	46.93	43.89	1 M	46.96	2 M	50.57	3 M	47.25	4 M	42.96	5 F	40.24	6 F	44.66	7 F	45.62	8 F	45.04
21452	42.81	44.53	1 M	33.19	2 M	43.85	3 M	46.90	4 M	47.29	5 F	44.81	6 F	43.36	7 F	45.61	8 F	44.33
21453	48.26	44.34	1 M	46.48	2 M	49.86	3 M	49.81	4 M	46.89	5 F	50.11	6 F	42.35	7 F	41.82	8 F	43.06
21454	49.19	47.58	1 M	45.25	2 M	49.01	3 M	51.62	4 M	50.87	5 F	48.04	6 F	47.92	7 F	47.29	8 F	47.08
21455	48.70	50.14	1 M	51.13	2 M	47.34	3 M	46.12	4 M	50.22	5 F	51.27	6 F	46.95	7 F	50.12	8 F	52.23
21456	45.67	44.94	1 M	46.34	2 M	43.84	3 M	43.59	4 M	48.90	5 F	45.98	6 F	43.11	7 F	45.48	8 F	45.20
21458	57.78	51.25	1 M	D17	2 M	57.76	3 M	56.75	4 M	58.82	5 F	50.72	6 F	50.12	7 F	50.73	8 F	53.42
21459	45.12	45.62	1 M	46.35	2 M	43.89	3 F	42.49	4 F	43.00	5 F	44.57	6 F	45.35	7 F	49.59	8 F	48.70
21460	43.93	42.80	1 M	45.49	2 M	44.44	3 M	41.59	4 M	44.18	5 F	44.42	6 F	43.39	7 F	41.56	8 F	41.84
21461	50.27	52.13	1 M	48.59	2 M	52.62	3 M	49.61	4 F	53.42	5 F	50.83						
21462	43.19	40.98	1 M	44.10	2 M	39.56	3 M	43.50	4 M	45.60	5 F	41.11	6 F	42.31	7 F	40.39	8 F	40.11
21463	45.60	45.69	1 M	47.05	2 M	42.00	3 M	48.90	4 M	44.45	5 F	41.15	6 F	44.90	7 F	49.24	8 F	47.47
21464	45.56	45.42	1 M	44.89	2 M	41.83	3 M	49.78	4 M	45.74	5 F	46.58	6 F	46.04	7 F	43.20	8 F	45.86
21466	41.65	-	1 M	40.26	2 M	43.04												
21467	57.54	54.72	1 M	55.34	2 M	57.22	3 M	58.32	4 M	59.27	5 F	55.78	6 F	53.62	7 F	54.75		
21468	47.06	48.46	1 M	44.72	2 M	46.78	3 M	48.18	4 M	48.55	5 F	50.56	6 F	47.49	7 F	44.86	8 F	50.92
21469	57.29	54.04	1 M	61.92	2 M	53.62	3 M	56.68	4 M	56.93	5 F	54.88	6 F	52.02	7 F	54.90	8 F	54.36
21470	52.87	52.16	1 M	50.49	2 M	56.33	3 M	51.80	4 F	51.96	5 F	50.82	6 F	52.60	7 F	51.31	8 F	54.11
21471	47.83	48.51	1 M	47.23	2 M	53.90	3 M	44.87	4 M	45.32	5 F	52.79	6 F	42.85	7 F	51.56	8 F	46.84
21473	50.56	50.24	1 M	44.79	2 M	56.33	3 M	50.93	4 M	50.20	5 F	50.51	6 F	51.28	7 F	44.63	8 F	54.53
21474	48.63	48.95	1 M	50.11	2 M	47.56	3 M	50.36	4 M	46.50	5 F	49.10	6 F	51.32	7 F	47.92	8 F	47.47
21475	46.06	44.01	1 M	47.21	2 M	50.60	3 M	45.62	4 M	44.91	5 M	42.03	6 M	45.97	7 F	42.32	8 F	45.70
21476	48.52	48.22	1 M	48.83	2 M	51.41	3 M	46.28	4 M	47.56	5 F	47.84	6 F	50.98	7 F	46.94	8 F	47.12
21477	50.97	48.39	1 M	51.66	2 M	55.44	3 M	47.20	4 M	49.59	5 F	48.67	6 F	46.31	7 F	43.56	8 F	55.00
MEAN	48.18	47.63																
S.D.	4.50	3.61																
N	25	24																

D= DEAD

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 300.0 PPM

LACTATION DAY: 21

LACTATION DAY: 21			P S		P S		P S		P S		P S		P S		P S		P S									
LITTER	MEAN		P U E	S E	P X	WEIGHT	P U E	S E	P X	WEIGHT	P U E	S E	P X	WEIGHT	P U E	S E	P X	WEIGHT								
	M	F																								
21478	43.81	46.25	1 M		45.20	2 M		48.34	3 M		48.87	4 M		32.83	5 F		50.44	6 F		48.99	7 F		42.07	8 F		43.50
21479	47.42	45.34	1 M		45.22	2 M		46.84	3 M		48.03	4 M		49.58	5 F		43.17	6 F		46.61	7 F		44.76	8 F		46.83
21480	48.61	47.12	1 M		52.80	2 M		46.53	3 M		51.18	4 M		43.95	5 F		41.88	6 F		46.87	7 F		51.54	8 F		48.19
21481	46.94	45.96	1 M		49.26	2 M		47.95	3 M		43.62	4 F		49.24	5 F		46.10	6 F		42.95	7 F		46.82	8 F		44.71
21482	50.82	-	1 M		50.73	2 M		50.90																		
21483	50.90	46.98	1 M		51.75	2 M		50.00	3 M		52.94	4 M		48.92	5 F		M 5	6 F		45.64	7 F		48.31	8 F		46.98
21485	43.76	43.14	1 M		45.61	2 M		43.01	3 M		43.71	4 M		42.72	5 F		44.74	6 F		39.83	7 F		42.18	8 F		45.80
21486	48.42	50.44	1 M		51.65	2 M		55.88	3 M		44.83	4 M		41.30	5 F		51.45	6 F		50.60	7 F		49.98	8 F		49.72
21487	50.78	48.98	1 M		51.49	2 M		52.00	3 M		46.34	4 M		53.27	5 F		48.29	6 F		46.22	7 F		50.42	8 F		50.99
21488	48.97	50.16	1 M		51.12	2 M		54.45	3 M		40.22	4 M		50.07	5 F		52.15	6 F		47.65	7 F		50.82	8 F		50.01
21490	48.61	49.18	1 M		51.05	2 M		44.91	3 M		49.88	4 F		46.56	5 F		46.80	6 F		50.60	7 F		49.32	8 F		52.61
21491	48.49	46.00	1 M		47.62	2 M		50.95	3 M		45.81	4 M		49.59	5 F		45.49	6 F		41.91	7 F		47.80	8 F		48.80
21492	45.55	47.85	1 M		46.65	2 M		45.95	3 M		44.06	4 F		45.38	5 F		47.63	6 F		50.53						
21493	58.64	54.36	1 M		55.68	2 M		61.21	3 M		59.04	4 F		53.42	5 F		55.30									
21494	45.87	42.46	1 M		44.88	2 M		46.50	3 M		46.56	4 M		45.54	5 F		39.14	6 F		43.67	7 F		41.22	8 F		45.81
21497	44.27	44.40	1 M		43.82	2 M		45.10	3 M		42.13	4 M		46.04	5 F		44.63	6 F		45.59	7 F		45.28	8 F		42.12
21498	44.01	42.96	1 M		44.59	2 M		44.00	3 M		42.30	4 M		45.16	5 F		48.31	6 F		41.26	7 F		40.34	8 F		41.93
21499	-	28.96	1 F		28.96																					
21500	42.58	44.32	1 M		42.93	2 M		41.33	3 M		41.41	4 M		44.66	5 F		46.10	6 F		40.84	7 F		43.65	8 F		46.68
21501	49.56	45.76	1 M		48.54	2 M		46.91	3 M		53.22	4 F		48.21	5 F		47.66	6 F		43.07	7 F		48.82	8 F		41.02
21502	55.46	53.85	1 M		53.69	2 M		52.95	3 M		57.23	4 M		57.98	5 F		58.40	6 F		57.38	7 F		50.26	8 F		49.37
21503	50.50	47.34	1 M		48.91	2 M		51.80	3 M		49.74	4 M		51.55	5 F		47.66	6 F		49.21	7 F		47.95	8 F		44.53
21504	43.00	39.22	1 M		46.93	2 M		39.02	3 M		44.23	4 M		41.82	5 F		38.17	6 F		41.43	7 F		40.64	8 F		36.66
21505	46.59	44.98	1 M		49.64	2 M		46.81	3 M		44.61	4 M		45.28	5 F		45.83	6 F		42.21	7 F		44.69	8 F		47.21
MEAN	47.98	45.91																								
S.D.	3.92	5.08																								
N	23	23																								

M= MISSING

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 21

LITTER	MEAN		P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S	P S
	M	F	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E	U E
			P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X	P X
			WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
21506	46.48	47.66	1 M 46.13	2 M 48.97	3 M 43.24	4 M 47.56	5 F 46.38	6 F 49.36	7 F 48.45	8 F 46.44							
21507	39.21	36.09	1 M 40.68	2 M 40.56	3 M 37.56	4 M 38.04	5 F 36.28	6 F 38.99	7 F 30.53	8 F 38.57							
21508	50.40	48.30	1 M 50.40	2 F 46.83	3 F 48.19	4 F 50.45	5 F 47.72										
21510	55.76	55.00	1 M 57.31	2 M 54.21	3 F 58.69	4 F 56.38	5 F 53.68	6 F 53.09	7 F 53.17								
21511	46.27	46.45	1 M 44.17	2 M 46.83	3 M 47.07	4 M 47.02	5 F 45.45	6 F 45.58	7 F 45.24	8 F 49.52							
21513	47.42	43.56	1 M 49.34	2 M 48.87	3 M 45.54	4 M 45.93	5 F 45.61	6 F 43.27	7 F 43.04	8 F 42.31							
21514	48.06	47.73	1 M 49.02	2 M 45.61	3 M 47.10	4 M 50.52	5 F 47.64	6 F 48.96	7 F 47.11	8 F 47.23							
21515	52.02	50.04	1 M 48.90	2 M 54.24	3 M 55.64	4 M 49.28	5 F 51.64	6 F 48.62	7 F 50.46	8 F 49.43							
21516	53.05	50.75	1 M 54.01	2 M 54.88	3 M 54.29	4 M 49.00	5 F 48.50	6 F 45.95	7 F 52.01	8 F 56.53							
21517	56.06	49.23	1 M 56.86	2 M 55.28	3 M 53.74	4 M 58.37	5 F 49.79	6 F 47.78	7 F 47.82	8 F 51.52							
21518	52.40	46.59	1 M 51.43	2 M 48.62	3 M 55.89	4 M 53.68	5 F 45.74	6 F 47.24	7 F 46.84	8 F 46.54							
21519	59.57	56.93	1 M 58.74	2 M 61.33	3 M 60.72	4 M 57.49	5 F 57.00	6 F 56.72	7 F 57.14	8 F 56.86							
21520	44.02	44.32	1 M 44.52	2 M 49.04	3 M 38.99	4 M 43.54	5 F 47.02	6 F 41.84	7 F 43.38	8 F 45.02							
21521	50.56	47.48	1 M 47.93	2 M 52.52	3 M 51.78	4 M 50.00	5 F 51.94	6 F 46.50	7 F 47.92	8 F 43.55							
21522	48.55	48.72	1 M 48.54	2 M 55.03	3 M 41.71	4 M 48.93	5 F 46.15	6 F 49.91	7 F 50.99	8 F 47.84							
21524	45.95	47.00	1 M 49.27	2 M 45.64	3 M 47.62	4 M 41.26	5 F 46.65	6 F 46.00	7 F 48.79	8 F 46.56							
21525	44.88	42.87	1 M 46.80	2 M 47.68	3 M 40.58	4 M 44.45	5 F 45.75	6 F 41.01	7 F 44.59	8 F 40.14							
21526	58.92	55.77	1 M 58.59	2 M 56.99	3 M 57.75	4 M 62.33	5 F 53.05	6 F 56.41	7 F 58.17	8 F 55.45							
21528	51.84	50.25	1 M 53.25	2 M 50.66	3 M 52.31	4 M 51.13	5 F 51.85	6 F 49.09	7 F 49.41	8 F 50.67							
21529	45.76	43.02	1 M 45.80	2 M 47.37	3 M 45.25	4 M 44.62	5 F 43.73	6 F 45.60	7 F 39.11	8 F 43.66							
21530	52.67	47.43	1 M 49.65	2 M 54.64	3 M 53.13	4 M 53.24	5 F 48.27	6 F 47.90	7 F 46.58	8 F 46.98							
21532	43.40	43.44	1 M 44.53	2 M 44.46	3 M 41.13	4 M 43.49	5 F 42.99	6 F 43.67	7 F 43.38	8 F 43.70							
21533	52.43	49.93	1 M 51.91	2 M 54.19	3 M 51.20	4 F 53.79	5 F 46.75	6 F 43.69	7 F 55.47								
MEAN	49.81	47.76															
S.D.	5.10	4.59															
N	23	23															

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 21

LITTER	MEAN		P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT	P S U E	P X WEIGHT
	M	F																
21534	45.60	44.56	1 M	44.61	2 M	44.89	3 M	45.85	4 M	47.05	5 F	43.28	6 F	44.05	7 F	44.98	8 F	45.95
21535	50.05	48.76	1 M	49.33	2 M	51.47	3 M	49.92	4 M	49.49	5 F	47.15	6 F	48.99	7 F	51.29	8 F	47.59
21536	42.40	39.94	1 M	41.88	2 M	42.19	3 M	42.16	4 M	43.36	5 F	38.12	6 F	38.51	7 F	41.09	8 F	42.06
21537	47.77	43.10	1 M	50.03	2 M	46.14	3 M	45.31	4 M	49.59	5 F	44.09	6 F	43.21	7 F	41.88	8 F	43.22
21538	39.46	38.74	1 M	38.73	2 M	37.60	3 M	40.68	4 M	40.83	5 F	37.02	6 F	39.84	7 F	41.38	8 F	36.72
21540	43.94	40.76	1 M	44.37	2 M	45.45	3 M	43.32	4 M	42.61	5 F	40.18	6 F	40.68	7 F	41.34	8 F	40.84
21541	47.16	43.11	1 M	45.41	2 M	46.70	3 M	48.02	4 M	48.49	5 F	44.19	6 F	42.20	7 F	45.50	8 F	40.54
21542	49.47	45.60	1 M	50.69	2 M	47.65	3 M	48.57	4 M	51.68	5 M	48.75	6 F	40.08	7 F	46.85	8 F	49.86
21543	48.95	47.00	1 M	47.80	2 M	49.39	3 M	50.46	4 M	48.16	5 F	47.65	6 F	49.09	7 F	44.95	8 F	46.32
21544	44.13	40.62	1 M	45.52	2 M	45.97	3 M	44.46	4 M	40.56	5 F	41.93	6 F	37.94	7 F	42.66	8 F	39.95
21546	53.59	50.85	1 M	53.97	2 M	53.53	3 M	51.14	4 M	55.72	5 F	51.49	6 F	50.28	7 F	51.93	8 F	49.69
21547	52.62	50.63	1 M	51.83	2 M	50.82	3 M	52.87	4 M	55.76	5 M	53.11	6 M	51.32	7 F	49.33	8 F	51.92
21548	44.10	42.64	1 M	42.73	2 M	47.29	3 M	41.95	4 M	44.43	5 F	44.00	6 F	41.80	7 F	43.85	8 F	40.90
21549	45.77	44.39	1 M	45.53	2 M	48.10	3 M	42.35	4 M	46.39	5 M	46.47	6 F	44.24	7 F	44.90	8 F	44.04
21550	45.40	43.89	1 M	46.43	2 M	46.58	3 M	45.10	4 M	43.50	5 F	44.38	6 F	43.71	7 F	39.60	8 F	47.86
21551	46.54	45.24	1 M	50.82	2 M	48.51	3 M	43.91	4 M	42.92	5 F	44.61	6 F	46.82	7 F	45.99	8 F	43.53
21552	45.01	47.55	1 M	45.68	2 M	45.27	3 M	47.07	4 M	42.02	5 F	D17	6 F	47.20	7 F	49.20	8 F	46.25
21553	42.88	40.83	1 M	44.92	2 M	42.01	3 M	42.34	4 M	42.26	5 F	41.16	6 F	40.22	7 F	39.22	8 F	42.73
21554	42.77	42.91	1 M	43.80	2 M	39.57	3 M	44.48	4 M	43.22	5 F	39.72	6 F	46.14	7 F	42.44	8 F	43.35
21555	49.28	49.38	1 M	48.79	2 M	49.09	3 M	50.44	4 M	48.79	5 F	48.69	6 F	49.58	7 F	49.60	8 F	49.63
21556	47.16	47.08	1 M	44.51	2 M	50.04	3 M	47.65	4 M	46.46	5 F	48.00	6 F	47.26	7 F	47.47	8 F	45.59
21557	48.21	47.19	1 M	48.02	2 M	46.09	3 M	46.15	4 M	50.61	5 M	50.20	6 F	47.23	7 F	47.13	8 F	47.21
21558	57.80	52.89	1 M	59.44	2 M	56.87	3 M	58.73	4 M	56.15	5 F	52.60	6 F	53.18				
21559	23.71	23.61	1 M	24.73	2 M	23.30	3 M	25.31	4 M	21.52	5 F	25.92	6 F	23.47	7 F	23.76	8 F	21.27
21561	51.47	49.15	1 M	51.07	2 M	49.59	3 M	53.74	4 F	52.03	5 F	47.41	6 F	48.39	7 F	49.11	8 F	48.81
MEAN	46.21	44.42																
S.D.	6.17	5.72																
N	25	25																

D= DEAD

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 0.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21450	77.34	77.82	1 M	83.87	2 M	81.49	3 M	75.38	4 M	68.61	5 F	79.34	6 F	82.26	7 F	71.02	8 F	78.65
21451	84.07	74.65	1 M	88.43	2 M	88.02	3 M	74.97	4 M	84.88	5 F	72.51	6 F	75.18	7 F	76.62	8 F	74.30
21452	77.68	75.08	1 M	78.89	2 M	86.62	3 M	63.47	4 M	81.75	5 F	78.10	6 F	73.55	7 F	75.17	8 F	73.48
21453	84.38	74.60	1 M	88.76	2 M	81.62	3 M	85.52	4 M	81.63	5 F	69.57	6 F	69.96	7 F	74.59	8 F	84.30
21454	82.60	77.69	1 M	86.01	2 M	79.48	3 M	82.16	4 M	82.75	5 F	75.93	6 F	79.98	7 F	78.21	8 F	76.62
21455	86.54	85.17	1 M	90.65	2 M	87.67	3 M	84.89	4 M	82.96	5 F	90.27	6 F	86.60	7 F	76.65	8 F	87.16
21456	83.11	80.04	1 M	82.97	2 M	82.03	3 M	80.88	4 M	86.56	5 F	82.40	6 F	77.59	7 F	83.74	8 F	76.42
21458	99.38	86.46	1 M	D17	2 M	96.88	3 M	102.66	4 M	98.61	5 F	86.47	6 F	84.12	7 F	86.82	8 F	88.42
21459	86.37	80.57	1 M	84.87	2 M	87.86	3 F	79.64	4 F	81.42	5 F	80.70	6 F	82.63	7 F	82.41	8 F	76.65
21460	76.61	71.72	1 M	78.59	2 M	77.71	3 M	80.65	4 M	69.51	5 F	69.80	6 F	72.71	7 F	72.26	8 F	72.09
21461	88.78	86.76	1 M	87.10	2 M	86.69	3 M	92.56	4 F	88.38	5 F	85.15						
21462	78.40	72.26	1 M	82.70	2 M	81.58	3 M	77.36	4 M	71.95	5 F	73.29	6 F	72.85	7 F	70.08	8 F	72.83
21463	83.82	79.68	1 M	89.38	2 M	83.23	3 M	80.67	4 M	81.98	5 F	80.36	6 F	73.83	7 F	82.90	8 F	81.64
21464	69.47	68.53	1 M	70.44	2 M	76.02	3 M	63.38	4 M	68.04	5 F	68.80	6 F	67.15	7 F	69.28	8 F	68.90
21466	77.28	-	1 M	77.37	2 M	77.19												
21467	95.34	85.13	1 M	93.54	2 M	95.26	3 M	100.63	4 M	91.92	5 F	86.57	6 F	84.56	7 F	84.26		
21468	86.13	83.59	1 M	87.83	2 M	86.54	3 M	86.06	4 M	84.10	5 F	77.06	6 F	89.98	7 F	80.39	8 F	86.93
21469	101.95	89.20	1 M	102.59	2 M	98.77	3 M	94.64	4 M	111.80	5 F	89.51	6 F	88.88	7 F	89.44	8 F	88.99
21470	82.06	78.98	1 M	85.77	2 M	79.37	3 M	81.04	4 F	81.23	5 F	74.44	6 F	81.26	7 F	76.49	8 F	81.47
21471	86.84	83.71	1 M	87.26	2 M	94.71	3 M	82.68	4 M	82.72	5 F	83.93	6 F	76.16	7 F	87.98	8 F	86.77
21473	89.75	83.53	1 M	89.35	2 M	84.45	3 M	97.11	4 M	88.10	5 F	75.62	6 F	85.37	7 F	87.54	8 F	85.60
21474	84.10	83.29	1 M	82.83	2 M	81.45	3 M	85.11	4 M	87.03	5 F	79.23	6 F	88.99	7 F	80.06	8 F	84.89
21475	81.04	75.88	1 M	79.78	2 M	79.83	3 M	80.59	4 M	83.73	5 M	79.66	6 M	82.64	7 F	75.33	8 F	76.42
21476	88.37	82.26	1 M	86.85	2 M	92.42	3 M	86.44	4 M	87.76	5 F	83.12	6 F	86.62	7 F	80.21	8 F	79.10
21477	87.54	78.91	1 M	78.79	2 M	86.83	3 M	94.29	4 M	90.26	5 F	79.70	6 F	70.83	7 F	87.30	8 F	77.82
MEAN	84.76	79.81																
S.D.	7.15	5.32																
N	25	24																

D= DEAD



TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 300.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S		P S		P S		P S		P S		P S		P S	
	M	F	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT	U E	P X WEIGHT
21478	79.93	80.70	1 M	86.04	2 M	83.11	3 M	61.32	4 M	89.26	5 F	85.25	6 F	77.91	7 F	85.64
21479	71.79	65.73	1 M	71.00	2 M	77.80	3 M	73.80	4 M	64.55	5 F	60.62	6 F	67.38	7 F	68.34
21480	83.55	80.89	1 M	78.34	2 M	83.07	3 M	86.92	4 M	85.87	5 F	88.94	6 F	80.94	7 F	74.32
21481	86.44	81.08	1 M	92.71	2 M	86.30	3 M	80.32	4 F	88.40	5 F	76.76	6 F	83.45	7 F	77.93
21482	88.56	-	1 M	87.87	2 M	89.24										
21483	85.22	75.54	1 M	87.09	2 M	80.88	3 M	87.56	4 M	85.37	5 F	M 5	6 F	76.35	7 F	72.92
21485	73.61	79.27	1 M	71.86	2 M	69.47	3 M	77.13	4 M	75.98	5 F	81.53	6 F	78.54	7 F	78.67
21486	85.97	79.07	1 M	82.46	2 M	84.68	3 M	91.22	4 M	85.50	5 F	78.48	6 F	78.59	7 F	78.92
21487	88.05	80.26	1 M	83.12	2 M	93.80	3 M	92.00	4 M	83.26	5 F	81.44	6 F	79.63	7 F	77.86
21488	86.12	84.45	1 M	89.79	2 M	92.27	3 M	90.02	4 M	72.39	5 F	79.04	6 F	90.54	7 F	83.71
21490	85.08	83.46	1 M	88.53	2 M	85.27	3 M	81.43	4 F	84.55	5 F	84.82	6 F	86.76	7 F	77.36
21491	85.82	75.92	1 M	84.81	2 M	87.34	3 M	84.85	4 M	86.30	5 F	69.61	6 F	73.81	7 F	77.81
21492	82.75	81.87	1 M	81.30	2 M	83.56	3 M	83.40	4 F	84.07	5 F	78.88	6 F	82.65		
21493	95.98	84.82	1 M	97.73	2 M	99.70	3 M	90.50	4 F	83.98	5 F	85.66				
21494	85.83	76.00	1 M	84.34	2 M	89.05	3 M	84.04	4 M	85.88	5 F	75.90	6 F	83.39	7 F	71.93
21497	76.59	76.03	1 M	77.59	2 M	75.17	3 M	80.51	4 M	73.11	5 F	78.41	6 F	78.32	7 F	75.22
21498	75.69	71.05	1 M	79.45	2 M	71.68	3 M	75.20	4 M	76.43	5 F	81.22	6 F	67.28	7 F	65.61
21499	-	56.88	1 F	56.88												
21500	79.09	76.36	1 M	75.52	2 M	80.19	3 M	82.68	4 M	77.99	5 F	77.56	6 F	77.54	7 F	80.23
21501	88.14	80.26	1 M	89.03	2 M	91.80	3 M	83.58	4 F	83.66	5 F	81.79	6 F	77.12	7 F	77.54
21502	99.69	90.53	1 M	103.02	2 M	98.95	3 M	101.01	4 M	95.78	5 F	82.20	6 F	89.17	7 F	96.49
21503	85.93	75.02	1 M	85.67	2 M	88.60	3 M	80.75	4 M	88.72	5 F	77.24	6 F	71.64	7 F	76.22
21504	75.43	68.34	1 M	70.16	2 M	81.07	3 M	76.79	4 M	73.71	5 F	70.64	6 F	72.90	7 F	69.26
21505	80.88	74.57	1 M	82.41	2 M	85.53	3 M	78.83	4 M	76.75	5 F	73.21	6 F	79.60	7 F	74.65
MEAN	83.75	77.31														
S.D.	6.66	7.06														
N	23	23														

M= MISSING

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER

F2 PUPS GROUP: 1000.0 PPM

LACTATION DAY: 28

LITTER	MEAN		P S	P X	WEIGHT	P S	P X	WEIGHT	P S	P X	WEIGHT	P S	P X	WEIGHT	P S	P X	WEIGHT	P S	P X	WEIGHT
	M	F	U E			U E			U E			U E			U E			U E		
21506	84.31	82.78	1 M	93.07	2 M	75.86	3 M	83.43	4 M	84.88	5 F	84.01	6 F	80.36	7 F	83.90	8 F	82.85		
21507	74.39	67.44	1 M	70.04	2 M	75.13	3 M	76.59	4 M	75.80	5 F	70.69	6 F	73.12	7 F	57.64	8 F	68.31		
21508	91.89	77.97	1 M	91.89	2 F	77.02	3 F	73.86	4 F	81.50	5 F	79.51								
21510	97.23	94.10	1 M	99.69	2 M	94.77	3 F	93.24	4 F	90.73	5 F	97.76	6 F	94.13	7 F	94.65				
21511	83.97	77.85	1 M	83.30	2 M	87.14	3 M	80.05	4 M	85.37	5 F	74.30	6 F	84.58	7 F	78.19	8 F	74.31		
21513	80.11	73.16	1 M	77.92	2 M	79.32	3 M	79.31	4 M	83.88	5 F	73.96	6 F	69.59	7 F	75.08	8 F	74.00		
21514	83.66	82.23	1 M	92.30	2 M	83.15	3 M	83.10	4 M	76.10	5 F	85.05	6 F	81.83	7 F	80.90	8 F	81.15		
21515	91.70	85.41	1 M	82.73	2 M	95.70	3 M	100.85	4 M	87.51	5 F	87.19	6 F	86.75	7 F	85.35	8 F	82.33		
21516	90.74	84.35	1 M	88.04	2 M	93.22	3 M	92.87	4 M	88.83	5 F	85.23	6 F	82.58	7 F	91.11	8 F	78.49		
21517	93.14	80.21	1 M	87.70	2 M	93.82	3 M	96.77	4 M	94.29	5 F	78.43	6 F	85.10	7 F	77.17	8 F	80.13		
21518	86.12	77.34	1 M	79.16	2 M	83.57	3 M	95.96	4 M	85.78	5 F	74.91	6 F	76.85	7 F	76.52	8 F	81.08		
21519	94.43	86.32	1 M	94.94	2 M	89.50	3 M	92.47	4 M	100.81	5 F	85.92	6 F	86.38	7 F	86.31	8 F	86.66		
21520	69.10	66.93	1 M	76.89	2 M	65.22	3 M	68.55	4 M	65.73	5 F	73.04	6 F	63.12	7 F	65.69	8 F	65.86		
21521	89.45	81.11	1 M	83.03	2 M	88.12	3 M	94.53	4 M	92.12	5 F	79.66	6 F	81.51	7 F	77.27	8 F	86.00		
21522	81.22	74.53	1 M	81.69	2 M	76.24	3 M	81.90	4 M	85.06	5 F	73.91	6 F	74.62	7 F	78.44	8 F	71.13		
21524	81.28	77.16	1 M	76.09	2 M	82.76	3 M	79.45	4 M	86.81	5 F	74.54	6 F	77.65	7 F	76.82	8 F	79.61		
21525	78.70	74.48	1 M	81.26	2 M	75.26	3 M	80.81	4 M	77.46	5 F	81.14	6 F	78.50	7 F	70.47	8 F	67.79		
21526	95.75	86.51	1 M	101.76	2 M	93.53	3 M	93.00	4 M	94.69	5 F	88.61	6 F	86.25	7 F	89.23	8 F	81.95		
21528	87.41	81.52	1 M	86.34	2 M	89.18	3 M	86.49	4 M	87.62	5 F	78.06	6 F	83.50	7 F	82.62	8 F	81.92		
21529	83.02	76.88	1 M	84.62	2 M	79.72	3 M	84.22	4 M	83.50	5 F	80.71	6 F	68.62	7 F	79.04	8 F	79.16		
21530	90.69	77.09	1 M	94.07	2 M	93.19	3 M	90.75	4 M	84.76	5 F	79.62	6 F	75.58	7 F	76.27	8 F	76.87		
21532	76.67	74.68	1 M	72.11	2 M	76.31	3 M	79.74	4 M	78.51	5 F	75.65	6 F	71.08	7 F	74.58	8 F	77.41		
21533	91.33	84.33	1 M	86.54	2 M	93.22	3 M	94.23	4 F	89.38	5 F	79.06	6 F	72.00	7 F	96.87				
MEAN	85.93	79.32																		
S.D.	7.26	6.25																		
N	23	23																		

TABLE 7  
TWO-GENERATION REPRODUCTION STUDY IN SPRAGUE-DAWLEY (CD®) RATS WITH  
ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE (ADBAC) ADMINISTERED IN THE DIET

INDIVIDUAL PUP BODY WEIGHT (GRAMS) PER LITTER  
F2 PUPS GROUP: 2000.0 PPM

LACTATION DAY: 28

LITTER	MEAN M	F	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT	P S U E P X WEIGHT
21534	80.34	75.15	1 M 79.51	2 M 71.61	3 M 82.23	4 M 88.01	5 F 76.58	6 F 70.13	7 F 76.74	8 F 77.16	
21535	84.49	77.89	1 M 83.43	2 M 83.93	3 M 84.37	4 M 86.21	5 F 77.22	6 F 78.54	7 F 78.38	8 F 77.40	
21536	71.82	65.76	1 M 72.49	2 M 69.62	3 M 71.87	4 M 73.31	5 F 71.26	6 F 66.36	7 F 64.49	8 F 60.93	
21537	80.43	70.56	1 M 82.07	2 M 79.87	3 M 79.86	4 M 79.90	5 F 72.10	6 F 70.27	7 F 66.67	8 F 73.21	
21538	65.62	62.91	1 M 60.31	2 M 68.36	3 M 69.90	4 M 63.89	5 F 58.88	6 F 62.46	7 F 62.00	8 F 68.29	
21540	75.64	67.34	1 M 72.94	2 M 77.26	3 M 73.02	4 M 79.33	5 F 67.67	6 F 67.80	7 F 69.59	8 F 64.30	
21541	71.49	64.99	1 M 70.29	2 M 66.21	3 M 75.47	4 M 73.98	5 F 65.25	6 F 63.17	7 F 67.99	8 F 63.57	
21542	83.08	71.42	1 M 84.92	2 M 80.54	3 M 80.03	4 M 84.01	5 M 85.89	6 F 77.59	7 F 75.47	8 F 61.20	
21543	80.61	76.65	1 M 76.74	2 M 82.00	3 M 82.68	4 M 81.01	5 F 72.72	6 F 83.59	7 F 75.62	8 F 74.66	
21544	78.48	67.06	1 M 82.75	2 M 70.53	3 M 80.34	4 M 80.30	5 F 71.20	6 F 56.50	7 F 74.31	8 F 66.24	
21546	88.32	80.63	1 M 87.32	2 M 86.90	3 M 88.60	4 M 90.47	5 F 79.02	6 F 82.63	7 F 81.94	8 F 78.95	
21547	86.52	77.62	1 M 85.40	2 M 92.77	3 M 88.05	4 M 82.65	5 M 82.77	6 M 87.50	7 F 78.97	8 F 76.26	
21548	76.26	69.45	1 M 79.38	2 M 80.10	3 M 74.50	4 M 71.06	5 F 65.06	6 F 68.76	7 F 74.77	8 F 69.22	
21549	74.61	66.26	1 M 77.94	2 M 69.33	3 M 76.91	4 M 77.44	5 M 71.45	6 F 73.53	7 F 58.61	8 F 66.64	
21550	75.42	71.82	1 M 71.20	2 M 80.61	3 M 75.71	4 M 74.18	5 F 81.15	6 F 72.54	7 F 62.49	8 F 71.11	
21551	78.52	72.47	1 M 78.33	2 M 76.36	3 M 74.61	4 M 84.76	5 F 71.95	6 F 73.60	7 F 76.05	8 F 68.28	
21552	76.95	76.39	1 M 76.37	2 M 74.72	3 M 78.47	4 M 78.25	5 F D17	6 F 77.68	7 F 78.38	8 F 73.11	
21553	73.17	65.70	1 M 74.98	2 M 71.03	3 M 69.84	4 M 76.83	5 F 73.82	6 F 57.64	7 F 63.33	8 F 68.00	
21554	74.22	74.49	1 M 73.86	2 M 71.26	3 M 73.10	4 M 78.66	5 F 75.46	6 F 67.25	7 F 73.47	8 F 81.76	
21555	85.50	82.56	1 M 88.90	2 M 80.68	3 M 89.72	4 M 82.70	5 F 85.94	6 F 84.09	7 F 81.73	8 F 78.49	
21556	77.53	75.53	1 M 77.57	2 M 83.51	3 M 76.31	4 M 72.72	5 F 80.52	6 F 66.95	7 F 78.44	8 F 76.21	
21557	82.70	70.53	1 M 80.35	2 M 81.41	3 M 86.86	4 M 82.19	5 M 82.68	6 F 66.25	7 F 69.17	8 F 76.16	
21558	86.19	74.12	1 M 87.86	2 M 90.33	3 M 82.72	4 M 83.83	5 F 71.69	6 F 76.55			
21559	41.48	40.14	1 M 43.85	2 M 35.62	3 M 44.88	4 M 41.58	5 F 38.08	6 F 39.52	7 F 37.23	8 F 45.72	
21561	81.06	79.20	1 M 83.41	2 M 74.43	3 M 85.34	4 F 78.49	5 F 80.57	6 F 75.61	7 F 80.11	8 F 81.22	
MEAN	77.22	71.07									
S.D.	9.22	8.35									
N	25	25									

D= DEAD

**APPENDIX 5**  
**Protocol and Amendment**

**(28 Pages)**



## BUSHY RUN RESEARCH CENTER

R. D. 4, Mellon Road, Export, Pennsylvania 15632

Telephone (412) 733-5200

### PROTOCOL

**TITLE:** Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

**BERC PROJECT NUMBER:** 87-37-97105

**TESTING FACILITY:** Bushy Run Research Center  
RD 4, Mellon Road  
Export, PA 15632  
Attention: R. W. Tyl  
(412) 733-5277

**SPONSOR:** ADBAC QUAT Joint Venture/  
Chemical Specialties Manufacturers Association  
Suite 1120  
1001 Connecticut Avenue, N.W.  
Washington, DC 20036

**SPONSOR'S REPRESENTATIVE:** Gerald P. Schoenig, Ph.D.  
54 Canterbury Road  
Charlottesville, VA 22901

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Rochelle W. Tyl, Ph.D. 3/24/88  
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Linda J. Calispi, B.S. Date  
Group Leader, Good Laboratory  
Practices/Quality Assurance

F. L. Frank 3/27/88  
Fred R. Frank, Ph.D. Date  
Director

Sponsor Representative:

Gerald P. Schoenig 3/31/88  
Gerald P. Schoenig, Ph.D. Date

1247P-3

Bushy Run Research Center  
A Joint Mellon Institute—Union Carbide Corporation Operation

I. PURPOSE

The purpose of this study will be to evaluate the potential of alkyl dimethyl benzyl ammonium chloride (ADBAC) administered in the diet to CD® rats to produce alterations in parental fertility, maternal pregnancy and lactation, and growth and development of the offspring for two generations, one litter per generation. The study will be conducted in accordance with United States Environmental Protection Agency's Guidelines for Pesticide Registration (Subdivision F, Hazard Evaluation: Human and Domestic Animals, Section 83-4) dated November 1984, and the Agency's Good Laboratory Practice Standards, 40 C.F.R., Part 160 (see Section II.J.).

II. GENERAL

A. Sponsor

ADBAC QUAT Joint Venture/  
Chemical Specialties Manufacturers Association  
Suite 1120  
1001 Connecticut Avenue, N.W.  
Washington, DC 20036

B. Sponsor's Representative Gerald P. Schoenig, Ph.D.

C. Testing Facility Bushy Run Research Center, Export, PA 15632

D. BRRC Project No. 87-37-97105

E. Personnel

Study Director:

R. W. Tyl, Ph.D., DABT  
Manager, Reproductive and Developmental  
Toxicology

Reproductive and  
Developmental Toxicology  
Personnel:

R. R. Altman  
B. L. Butler, AHT, AALAS Cert. II  
M. A. Copeman, A.A., B.A.  
D. L. Fait, AALAS Cert. II  
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G. W. Klingensmith, AALAS Cert. I.  
E. V. Weaver, B.A.

Chronic Oral Personnel:

Analytical Personnel:	J. P. Van Miller, Ph.D., DABT, Manager M. A. Vrbanic, B.A.
Attending Veterinarian:	P. E. Losco, VMD, Diplomate ACVP
Necropsy:	M. A. McGee, HT(ASCP), Supervisor
Histology:	M. A. McGee, HT(ASCP), Supervisor
Pathologist:	P. E. Losco, VMD, Diplomate ACVP
Quality Assurance Personnel:	L. J. Calisti, B.S., AALAS Cert. III Group Leader J. R. Bernard, B.S. J. H. Coleman, B.S., AALAS Cert. III R. R. Altman
Animal Care:	

Other study team members to be determined.

- F. Starting Date of Acclimation April 4, 1988
- G. Starting Date of Test Chemical Administration April 20, 1988
- H. Proposed Date for Completion of In-Life Phase March 12, 1989
- I. Proposed Date for Submission of the Draft Final Report Sept. 10, 1989
- J. Basis for the Study

This study will be performed in full compliance with the following guidelines and regulations.

U.S. Environmental Protection Agency Federal Insecticide, Fungicide and Rodenticide Act EPA(FIFRA) Guidelines for Pesticide Registration (Subdivision F, Hazard Evaluation: Human and Domestic Animals, Section 83-4), November, 1984.

OECD Guideline for Testing of Chemicals, No. 416, May 26, 1983.

Good Laboratory Practice Regulations, EPA. Fed. Reg., Vol. 48, No. 230, November 29, 1983 as cited in Fed. Reg., Vol. 49, No. 88, May 2, 1984, pp 18738-9.

K. Alteration of Design

Alterations of this protocol by the Study Director may be made with agreement of the Sponsor as the study progresses. Any alterations will be described in detail in amendment form, signed by the Study Director and the Sponsor's Representative and added to this protocol.

III. METHODS

A. Test Animals

Species:	Sprague Dawley Derived Outbred Albino Rat [Cr1:CD®(SD)BR], known as the Charles River CD® Rat
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**Supplier:** Charles River Breeding Laboratories, Kingston, NY

**Rationale:** The albino rat is the species of choice for multi-generation reproduction studies.

**Number and sex:** One hundred fifty (150) virgin female and the same number of virgin male rats will be ordered for the study. Females will be nulliparous and nonpregnant. There will be 224 animals (112 males and 112 females) assigned to the study at the initiation of the treatment periods (See Section III.E).

**Age and Weight:** The animals will be twenty-eight days of age on the scheduled animal receipt date (approximate weights upon arrival: 75 grams for males and 65 grams for females). Dosing will begin when the animals are approximately six weeks old (males approximately 150 grams, females approximately 125 grams).

**Acclimation and Pretest Evaluations:** Upon their arrival at the laboratory, the animals will be transported to the room selected for the study. Once in the room, the animals will be removed from the shipping cartons and examined. All animals with evidence of disease or physical abnormalities will be discarded. If an unusually large number of rats show evidence of disease or physical abnormalities, the batch of rats will be rejected for use in the study. A total of 20 rats (10 male and 10 female) will be randomly selected for a pretest health screen discussed below.

All remaining animals will be housed two per cage for approximately one week in order to acclimatize the rats with the automatic watering system. After this period, the animals will be housed individually (except during mating and lactation).

During the two-week pretest period, animals will be fed the same basal diet which will be used during the study. Animals will be observed twice daily for any clinical signs of disease or abnormality and individual detailed physical examinations will be conducted weekly. Animals showing abnormalities deemed by the Study Director or other appropriate supervisory personnel to render the animal unacceptable for placement on the study will be sacrificed and discarded on the day observed. If an unusually large number of rats show abnormalities, the batch of rats will be rejected for use in the study.



Ten days before the study is scheduled to begin, all rats will be weighed. The rats will be weighed again approximately seven days later (but no sooner than three days prior to dosing). Any rat whose weight gain during this period is not considered normal for this age and strain of rat, or whose absolute body weight at the second weighing is outside  $\pm 20\%$  of the population mean for each sex, will not be considered for the study.

Pretest Health  
Screen:

The pretest health screen will be performed within two days after the receipt of the animals. This screen will consist of clinical laboratory studies, a viral screen, examinations for fecal parasites, gross necropsy examinations, and histopathological evaluations of selected tissues. The screen will be performed on 10 animals/sex selected directly from the shipping cartons with as many cartons as possible being represented. The clinical laboratory studies and gross necropsy examinations will be conducted on all 20 rats selected for the health screen. The following clinical laboratory studies will be conducted:

Hematology

Clinical Chemistry

Hematocrit  
Hemoglobin  
Erythrocyte count  
Total leukocyte count  
Differential leukocyte count  
Platelet count

AST (SGPT)  
ALT (SGOT)  
BUN

The viral screen will be conducted on five animals/sex selected from the 20 rats designated for the health screen. The following viruses will be included in the viral screen:

Pneumonia virus of mice (PVM)  
Reovirus type 3 (Reo3)  
Kilham rat virus (KRV)  
Toolen H-1  
Sendai  
Lymphocytic choriomeningitis (LCM)  
Rat coronavirus  
SDA  
Microplasma pulmonis  
Minute virus of mice (MVM)  
Polyoma virus  
Encephalomyelitis (GDVII)  
Mouse adenovirus FL/K87 (MAD)

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Fecal examination for parasites will be conducted using a cellophane tape test on 5 animals/sex from the 20 animals selected for the pretest health screen, and by zinc sulfate flotation from cecal contents obtained at necropsy on 5 animals/sex.

Histopathology will be performed on three sacrificed animals/sex. At least the following tissues will be examined: liver, kidneys, trachea, lungs, heart, spleen, salivary glands, submandibular lymph nodes, and nasal cavities.

The purpose of this screen is to determine the suitability of the population of animals proposed for this study. Therefore, the results of this screen will be discussed with the Sponsor's Representative before the study begins.

**Identification:** Animals shall be uniquely identified prior to initiation of the study by both toe clip and/or ear notch and the method and numbers documented in the study records.

**Extra Animals:** Animals received with the initial shipment but not used in the study will be removed from the study room prior to the start of the treatment period. Records will be kept documenting the fate of all animals received for the study.

**B. Husbandry**

**Conditions:** The experiment will be carried out under standard laboratory conditions in animal room 173 in the Chemical Hygiene Fellowship Building of BRRC. The animals will be housed two per cage during the first week of the acclimation period. Thereafter, they will be individually housed except during the mating and lactation periods. Stainless steel cages with wire mesh floors will be used. Cages will be changed and sanitized at least once every two weeks. Paperboard kept under each cage will be changed at least three times per week. Faces of racks will be spaced at least four feet apart and away from walls. The racks will be rotated once every two weeks according to a predetermined schedule in order to better assure equivalent environmental conditions for all animals. Each rotation will be documented. There will be no rotation during mating, gestation and lactation. Shoebox cage bedding will be changed weekly (or more frequently if necessary) and shoebox cages will be changed as needed.

Study animals will be housed two per cage (one male:one female from the same dose level) during the mating period (see section III.F). Females will be caged separately and individually once they have been successfully mated (or at the end of the mating period). Successfully mated females will be transferred to shoe-box cages and furnished with appropriate nesting materials on day 20 of gestation. Specific information on the cages (dimensions, etc.) will be included in the study data and in the final report. All animals will be housed in BRRC animal room 173 from arrival to termination of the study. Temperature and humidity will be recorded continuously using an automatic recorder. The animal room will be maintained at a temperature of  $66 \pm 77^{\circ}\text{F}$  and a relative humidity of 40-70%. The temperature and relative humidity will be checked by a technician at each room check and a record will be kept indicating it was done. Appropriate corrective action will be taken whenever readings outside the specified limits are observed. If the temperature or humidity remains outside the prescribed range for more than 24 hours, the Sponsor's Representative will be notified.

The accuracy of the temperature and humidity recording devices will be checked periodically and calibrated when necessary. The verification and calibration data will be recorded. Any time the continuous recording equipment is found to be malfunctioning, the recorder will be replaced or the temperature and humidity of the animal room will be manually measured and recorded at each room check.

Fluorescent lighting will provide illumination 12 hours per day. There will be at least eight air changes per hour.

Diet:	Ground Purina Certified Rodent Chow® No. 5002 (Ralston Purina Co., St. Louis, MO) will be available <u>ad libitum</u> . The analyses of chemical composition and possible contaminants of each batch of diet will be performed by Ralston Purina Company (St. Louis, MO). Feed jars will be changed and sanitized once per week.
Water:	Tap water (Municipal Authority of Westmoreland County, Greensburg, PA) will be available <u>ad libitum</u> by automatic watering system with demand control valves mounted on each rack. Water pressure and function of the individual cage rack

systems will be checked at each room check and a record will be kept indicating it was done. Females in shoeboxes will be provided water ad libitum from water bottles with stainless steel sipper tubes since the shoeboxes will not accommodate the automatic watering system. Water bottles will be checked daily and filled as necessary. Water bottles will be changed and sanitized once per week. Drinking water contaminant levels will be measured at regular intervals per EPA specifications, to include the 129 "priority" pollutants, identified in the Federal Register 45(98), Appendix D, Part 122, and shall comply with human requirements.

C. Test Substance

Name: Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC), 80%  
Manufacturing Use Product (MUP)

CAS No.: 68391-91-5

Sponsor Identification: Lot 7293K

BRRC Number: 50-512

Purity: 81.09% (analyses provided by Sponsor)

Chain Length Distribution: C-12, 40%; C-14, 50%; C-16, 10%

Description: Very viscous, white opaque liquid.

Stability of Test Substance: The test substance is considered to be stable at room temperature for the duration of the study.

Storage Conditions: At ambient temperature in an environmentally controlled area.

Estimated Quantity Needed: 5 kg; after the assigned studies have been completed, all unused test material will be returned to the Sponsor.

Safety Precautions: A Material Safety Data Sheet (MSDS) will be supplied by the Sponsor. The MSDS and this protocol will be reviewed by all personnel prior to the initiation of the study. This review will be documented. Normal precautions for untested chemicals will be used. These procedures include the use of disposable paper or plastic coats or jumpsuits, hats, booties or shoe covers, and rubber gloves while in the animals rooms. Eye protection will include the use of safety glasses at all times.

D. Administration of Test Substance

Route: Oral; mixed in the diet. This is a possible route of human exposure and a common route of administration in reproduction studies.

Diet Preparation and Storage:

The basal diet will be ground Purina Certified Rodent Chow® #5002 (Ralston Purina Co., St. Louis, MO). The analyses of chemical composition and possible contaminants of each batch of diet will be performed by the manufacturer. The results of such analyses will be maintained in the study files and incorporated into the final report.

Test diets will be prepared by direct addition of ADBAC to ground rodent feed. A concentrated premix will be prepared to ensure maximal loss of the ethanol (approximately 12% by weight) from the test material during the original mixing time of 1 hour. Test diets will be prepared by appropriate dilutions of the concentrated premix or higher diet concentrations. Diets will be prepared based on active ingredient of the test material and corrections will be made for the alcohol lost during initial mixing. Diets will be prepared weekly during the study and stored at room temperature.

Analysis of Diet:

Before initiation of the study, trial batches of treated diets will be prepared to assess the homogeneity and stability of the prepared diets. Homogeneity (3 samples each from the top, middle, and bottom of the mixing bowl) will be established for the high and low diet concentrations selected for use in the study. In addition, homogeneity of the middle dose will be examined by analyzing one sample, in duplicate, from the top, middle and bottom of the mixing bowl. Longer term homogeneity will be evaluated by determining the ADBAC concentration in triplicate samples from the high and low diet concentrations selected for use in the study. Stability of the treated diets at the same target concentrations as those employed in this study has been determined for diets stored in the polyethylene containers used for storage of the diets for 21 days and in open glass feed jars stored in the animal room for 14 days, under the temperature and humidity conditions that will be maintained during the study, as part of another long-term study on this test chemical also

performed at BRRC (BRRC Project No. 87-37-97103). Subsamples of all diets collected for homogeneity (initial and longer term) will be frozen immediately after collection.

Each week, subsamples of approximately 100 g each will be taken from the top, middle, and bottom of each batch of prepared diet (including control). These subsamples will be mixed thoroughly and analyzed in duplicate for ADBAC concentration during study weeks 1 through 4 (prior to being administered to the animals) and once every four (4) weeks thereafter (after administration to the animals). A portion of all samples will be retained frozen. Periodically, the results of the analytical procedures will be reviewed by the Sponsor's Representative and, if all assays are acceptable, these samples will be discarded.

Standards for acceptable accuracy of mixing will be: the mean of the analyzed samples must be within  $\pm 10\%$  of nominal; the difference between duplicate analyses will not exceed 15%; and individual analyses will be within  $\pm 15\%$  of nominal. If one or more of these standards are not met, the diets will not be fed to the animals (for cases of prospective analyses) until the problem is resolved. For retrospective analyses, additional analyses will be conducted to help establish the cause of the problem. If additional analyses or diet preparations are necessary, these will be performed at no cost to the Sponsor. The Study Director and the Sponsor's Representative will be notified immediately when problems of this nature occur.

At the termination of the study, a sample of the test substance will be returned to the Sponsor for stability analysis.

Feeding Levels:	<u>Group No.</u>	<u>Level (ppm)*</u>
	1 control	0.0
	2 low	300.0
	3 intermediate	1000.0
	4 high	2000.0

\*In terms of actual ADBAC concentration

Duration of  
Treatment:

The measured feeding periods will be for at least two generations. The test diet for all animals assigned to each dosage level will be administered throughout the study.

# E. Study Design

## Number of Animals

per Group: The study will begin with 28 males/group and 28 females/group in order to yield at least 20 pregnant females/group.

FO animals will be assigned to the different groups by means of computer-generated weight-stratified randomization such that the body weights of all groups are homogeneous by statistical analysis at study initiation.

## Organization:

Group	Number of Animals		Dietary Level of
	Male	Female	ADBAC* (ppm)
Control	28	28	0.0
Low	28	28	300.0
Intermediate	28	28	1000.0
High	28	28	2000.0

\*In terms of actual ADBAC concentration

# F. Experimental Evaluations

## PARENTAL ANIMALS

Mortality and General Conditions: All animals will be observed for mortality and signs of overt toxicity twice each day, seven days a week. The first daily room check will generally be conducted before 9:00 a.m. and the second one will generally be conducted after 3:00 p.m. A minimum of 10 person-minutes will be spent during each room check, and these times will be recorded. Should mortality and/or signs of overt toxicity be observed, it will be recorded on the day observed. This will mean recording each finding initially and following with an examination (results recorded) of that specific animal at each subsequent room check, until that finding is no longer observed or the animal dies. An exception to this would be a recurring, frequently observed reaction for which a general statement will suffice, e.g. diarrhea has been observed at both daily room checks in most animals in the high dose group since (date). This general statement will be dated and updated at appropriate intervals.

Detailed Clinical Examinations: Clinical examinations will be conducted and recorded daily throughout the course of the study. This record will include the time of onset, severity (if appropriate) and duration of symptoms. These cage-side observations will include, but not be limited to, changes in: skin and fur, eyes, and mucous membranes, respiratory system, circulatory system, autonomic and central nervous system, somatomotor activity, and behavior pattern.

Body Weight: The body weights of the male rats will be determined and recorded initially and weekly thereafter. The body weights of female rats will be recorded in the same manner until confirmation of mating. During gestation, females will be weighed on gestational days 0, 6, 15 and 20. Dams producing litters will be weighed on days 0, 7, 14 and 21 postpartum. Body weight gains will be computed. Females which do not produce live litters or lose their litters during the lactation period will be weighed weekly (with the males) until sacrifice.

Food Consumption: Food consumption determinations will be conducted weekly for all males except during the 21-day mating period when food consumption will not be measured. Food consumption determinations will be conducted weekly for all females during the pre-mating periods of this study. Food consumption will not be measured during the mating period. Food consumption will be measured for the intervals, gestational days 0-7, 7-14, and 14-20 and on lactational days 0-7, and 7-14. Food consumption will not be measured for the interval, lactational days 14-21, since data collected after the pups begin to self feed are difficult to interpret. These measurements will be used to calculate the intake of the test article on a mg of test article/kg of body weight ratio.

During the mating phases of this study, food consumption will be monitored visually; however, feed intake measurements will not be conducted. Food consumption for females which do not have live litters will be measured weekly (with the males) until sacrifice.

Mating Procedures: Animals of the F0 generation will be approximately 6 weeks of age at the commencement of treatment. They will be maintained on their respective diets for at least 10 weeks prior to mating, i.e. until they are approximately 16 weeks of age. The animals will then be mated on the basis of one male to one female selected randomly within each dose group for a period of 21 days. After seven days the females of those pairs unmated will be placed with males of other unmated pairs within the group. This will be repeated



after a further seven days, allowing a total of 21 days to mate. If only one pair of rats has failed to mate in any group, no exchange will be made. A record of mating of the females in each group will be made by daily vaginal smears for sperm or appearance of the vaginal or dropped copulation plug throughout the mating period. The observation of dropped copulation plugs or the presence of vaginal sperm will be considered evidence of successful mating. The day a copulation plug or vaginal sperm is observed will be designated gestational day (gd) 0 [Hafez, E. W. E. (ed) (1970) Reproduction and Breeding Techniques for Laboratory Animals Lea and Febiger, Philadelphia, PA]. Once a plug or vaginal sperm has been observed, the male and female from that mating pair will be individually housed (See Section IIIB). For any mating pairs which do not show evidence of successful mating (i.e., no copulation plug or vaginal sperm is observed) the last scheduled mating day will be considered gd 0 for that female and the animals will be treated accordingly for subsequent events. On gd 20, each female will be transferred to a shoe-box cage (see Section IIIB). Females will be observed three times daily beginning on gd 20 for evidence of littering. The dams will be allowed to rear their young to Day 21 postpartum. When the last litter has reached Day 28 postpartum, 28 male and 28 female pups per group will be selected to form the basis of the F1 generation and 10/sex/dose will be selected for gross necropsy. Following selection of the F1 pups, excess pups will be sacrificed and subjected to a detailed external examination and discarded. F1 animals will then be placed on their respective diets for at least 10 weeks prior to mating for production of the F2 generation.

Animals of the F1 generation will be approximately 14 to 16 weeks of age at the initiation of the mating period. They will be mated as described above for the F0 animals. Brother-sister matings will be avoided whenever possible.

#### PROGENY

Mortality:	All pups will be sexed and examined as soon as possible after birth to determine the number of viable and stillborn members of each litter. Litters will be evaluated twice daily for survival.
Standardization of Litter Sizes:	On day 4 after birth, the size of each litter with more than eight pups will be adjusted by eliminating extra pups by a computer-generated random selection to yield, as nearly as possible, four males and four females per litter. Culled pups will be subjected to a detailed external examination, sacrificed by decapitation and discarded.

**Survival Data:** Survival indices will be calculated at 0, 4, 7 and 14 days after birth and at weaning (day 21).

**Body Weight and Sex Determination:** All live pups will be sexed and examined on postnatal day 0, and weighed individually and examined on postnatal days 1, 4, 7 and 14 and at weaning (day 21). The body weights and sexes will be recorded on an individual basis but the pups will not be uniquely identified at this stage.

**Symptoms:** All pups will be examined for physical abnormalities at birth and throughout the pre-weaning period. All pups dying during lactation will be necropsied when possible to investigate the cause of death. Any pups dying before day 4 will be necropsied and preserved in buffered neutral 10% formalin for determination of possible defects and cause of death. The thoracic and abdominal organs from pups which die after day 4 will be preserved in buffered neutral 10% formalin for possible subsequent histopathological examination.

**Selection:** All litters will be allowed to remain together for a minimum of seven days after weaning. Twenty-eight (28) males and 28 females from each group will then be selected from F1 litters on a random basis to become parents of the next generation (F1 parents). Each litter will be represented at least once per sex if possible. A second pup of the same sex from a given litter will not be selected until all possible litters are represented. All pups will be available for selection except those not expected to survive because of physical abnormalities. Records will be maintained on any pup excluded from the selection process.

An additional ten pups of each sex from each test group in the F1 and F2 generations will be randomly selected for necropsy. If possible, no more than one male and one female pup will be selected from any one litter (see below). The remaining offspring will be examined for gross external abnormalities, euthanized and discarded.

#### Necropsy and Pathology

##### of F1 and F2 Offspring

A gross internal examination will be made on any pup appearing abnormal or dying on test, and ten pups randomly selected for each sex from each test group of the F1 and F2 generations. Particular attention will be paid to the reproductive organs. The vagina, uterus, ovaries, testes with epididymides, seminal vesicles, prostate and all gross lesions noted during these examinations will be removed, fixed in neutral buffered 10% formalin and held for possible subsequent microscopic examination. All remaining weanlings will be examined for gross external abnormalities and then euthanized and discarded. Animals with external abnormalities will receive a complete internal examination.

Necropsy and Pathology  
of F0 and F1  
Parents

All parental animals in all groups (both generations) shall be subjected to a complete gross necropsy with special attention paid to the reproductive organs. The gross necropsy will include: examination of the external surfaces; all orifices; cranial cavity; carcass; external and cut surfaces of the brain and spinal cord; the thoracic, abdominal, and pelvic cavities and their viscera; and cervical tissues and organs. Sacrifice of the parental males will occur after the completion of parturition. Sacrifice of the parental females will occur after F1 or F2 litters have been weaned. The tissues listed below all from adult animals will be retained in buffered neutral 10% formalin, and histopathologic evaluation will be conducted on the tissues specified below from control and high dose group F0 and F1 parental animals:

vagina  
uterus  
ovaries  
testes  
epididymides  
seminal vesicles  
prostate  
gross lesions if any

Any of the above organs or tissues showing gross alterations and testes and epididymides from males which do not sire litters will be evaluated microscopically in the low and mid dose groups.

Multiple embedding will be used for compatible, normal appearing tissues, but tissues with gross lesions and tissue masses will be embedded individually. If, during routine sectioning of the paraffin blocks, a tissue is missed, the block will either be resectioned or, if necessary, melted down and the tissues reembedded at the discretion of the Sponsor. Following sectioning, all blocks will be dipped in paraffin.

**Animals Dying  
on Test:**

A complete gross necropsy and histopathologic examination will be conducted for any parental animals dying on test.

**Nonpregnant  
Females:**

The fixed (buffered neutral 10% formalin) uteri from any females of the F0 or F1 generations failing to produce a litter will be stained with potassium ferricyanide for confirmation of pregnancy status. This staining procedure will not affect subsequent histopathologic examination.

Statistical  
Analyses

The unit of comparison will be the male or the pregnant female (or the litter). Results of the quantitative continuous variables (e.g. body weights, food consumption, etc.) will be intercompared for the three treatment groups and one control group by use of Levene's test for equal variances, analysis of variance (ANOVA), and t-tests with Bonferroni probabilities. The t-tests will be used when the F value from the ANOVA is significant. When Levene's test indicates homogeneous variances and the ANOVA is significant, the pooled t-test will be used for pairwise comparisons. When Levene's test indicates heterogeneous variances, all groups will be compared by an ANOVA for unequal variances followed, when necessary, by the separate variance t-test.

Nonparametric data will be statistically evaluated using the Kruskal-Wallis test followed by the Mann-Whitney U test for pairwise comparisons when appropriate. Frequency data (such as the various indices) will be compared using the Fisher's Exact Test. For all statistical tests, the fiducial limit of 0.05 (two-tailed) will be used as the criterion for significance.

Retention of Specimens  
and Records

All raw data, reports and a sample of test substance from this study will be retained at the Laboratory for at least 10 years after completion of the study. Tissues preserved in fixative will be retained for at least five years. Paraffin blocks and tissue slides will be retained for at least 10 years.

Prior to discarding any of the above data or materials, the Sponsor will be contacted and given the option of obtaining it or arranging for continued storage. All data and materials mentioned above will remain the sole property of the Sponsor and can be removed from the laboratory at the Sponsor's discretion.

Good Laboratory  
Practices

The Bushy Run Research Center, through administration of a quality assurance program by the Good Laboratory Practices Committee and Quality Assurance Unit, assures compliance of all phases of toxicological studies with existing regulations and generally accepted good laboratory practices.

IV. REPORTING

Status Report

An unaudited status report (one copy) will be submitted to the Sponsor's Representative within 60 days after the completion of the F0 phase (completion of F1 weaning) of the study. This report will contain summary data on all parameters evaluated up until the point in time defined by the title of the report. Data on continuous variables will be summarized on tables as means and standard deviations while data on discrete variables will be summarized on incidence tables. Narrative will be included where necessary, but the purpose of this report will not be to provide definitive data analyses or conclusions.

Draft Final Report

Two draft copies (unaudited) of the final report will be submitted to the Sponsor's Representative within six months of the completion of the in-life portion of the study. This report will be a complete and accurate description and evaluation of the test procedures and experimental design, materials and methods, and results; and summary mean or incidence tables of in-life and pathology data.

Final Report

The draft final report will be reviewed by the Sponsor, and comments on the report will be provided to BRRC within eight weeks from the date of submission of the draft version. BRRC will consider these comments in preparing the final report. Assuming the Sponsor's comments are received at the specified time and no major revisions are required, BRRC will submit a final report within 30 days of receipt of the Sponsor's comments.

The final report will be audited by the QA department and contain a signed quality assurance statement. In addition, it will contain appendices with individual animal data and other pertinent information. It will also conform to the formatting specifications of EPA PR notice 86-5. Four copies of the final report will be submitted to the Sponsor under the time considerations specified in the paragraph above. Additional copies of the report (full or abbreviated) will be sent to the Sponsor upon request at additional cost after issuance of the final report and within 30 days of the request.

The final report will include:

Abstract  
Introduction  
Experimental Design  
Materials and Methods

Results  
Narrative discussion of parameters evaluated  
References  
Tables  
Good Laboratory Practice Compliance Statement  
Quality Assurance Inspection Summary Statement  
Appendices

Individual Maternal Data for F0 and F1 Generations:

- a. Identification number
- b. Age at beginning of study
- c. Age at death and manner of death.
- d. Weekly body weights prior to mating  
gestational and lactational body weights  
taken thereafter
- e. Weekly food consumption prior to mating and  
during pregnancy and lactation (through lactation day 14)
- f. Male rat (by identification number) used for mating.
- g. Date of delivery and gestation length in days.
- h. Total number of offspring per litter.
- i. Number and percent of live and dead offspring.
- j. General condition of offspring and mother through  
weaning.

Summary of Maternal data for F0 and F1 Generations:

- a. Mean maternal body weights and survival indices.
- b. Mean food and compound consumption (expressed  
as mg/kg/day).
- c. Mean litter size.
- d. Mean number of live and dead offspring.
- e. Number and percent of mothers showing behavioral  
abnormalities in nesting and nursing.
- f. Mating index (%) =

$$\frac{\text{Number of plug-/sperm-positive females}}{\text{Total number of females paired}} \times 100$$

- g. Fertility index (%) =

$$\frac{\text{Number of females pregnant}}{\text{Number of plug-/sperm-positive females}} \times 100$$

Individual Paternal Data for F0 and F1 Generations:

- a. Identification number.
- b. Age at beginning of study.
- c. Age at death and manner of death.
- d. Weekly body weights.
- e. Weekly food consumption.
- e. Reproductive behavior (impregnation and siring litters).

Summary of Paternal Data for F0 and F1 Generations:

- a. Mean male body weights and survival indices
- b. Mean weekly food consumption
- c. Mating index (%) =

$$\frac{\text{Number of males impregnating females}}{\text{Total number of males paired}}$$

- d. Fertility index (%) =

$$\frac{\text{Number of males siring litters}}{\text{Number of males impregnating females}} \times 100$$

Data From Each Litter Arranged by Dose Level:

- a. Total litter size.
- b. Number and percent of stillborn.
- c. Number and percent of live births.
- d. Weekly viability counts.
- e. Weekly body weights by sex per litter from day 1 of life to weaning (taken on days 1, 4, 7, 14, and 21 of lactation).
- f. Number and nature of physical abnormalities observed.
- g. Pup survival indices (also expressed as percentages).
- h. Sex ratio
- i. Indices:

Gestational index =

$$\frac{\text{Number of females with live litters}}{\text{Number of females pregnant}}$$

Live birth index =

$$\frac{\text{Number of live pups at birth}}{\text{Total number of pups born}}$$

4-Day survival index =

$$\frac{\text{Number of pups surviving 4 days (precull)}}{\text{Total number of live pups at birth}}$$

7-Day survival index =

$$\frac{\text{Number of pups surviving 7 days}}{\text{Total number of live pups at 4 days (postcull)}}$$

14-Day survival index =

$$\frac{\text{Number of pups surviving 14 days}}{\text{Total number of live pups at 7 days}}$$

21-Day survival index =

$$\frac{\text{Number of pups surviving 21 days}}{\text{Total number of live pups at 14 days}}$$

Lactation Index =

$$\frac{\text{Number of pups surviving 21 days}}{\text{Total number of live pups at 4 days (postcull)}}$$

Summary of Litter Data:

- a. Mean weekly body weights of all pups through weaning (taken on day 1, 4, 7, 14 and 21).
- b. Number and percent of pups with treatment-related physical or behavioral abnormalities.
- c. Mean pup survival indices through lactation day 21.

Summary and individual data from in-life, necropsy, and histopathological evaluations

Summary and details of dietary analyses

WPC/esk/1247P-3  
03-24-88





**MATERIAL SAFETY DATA SHEET**


P.O. BOX 646 DUBLIN OHIO 43017

<b>I</b>	PRODUCT NAME	VARIQUAT 80 ME	PL. C. N. N.	0001	DATE PREPARED	03/24/87	CCC NUMBER	649-255						
	SYNONYMS													
	PRODUCT IDENTIFICATION	None												
<b>II</b>	PRECAUTIONARY STATEMENTS (from product label)	<p><b>DANGER!</b> Keep out of reach of children! Corrosive. Causes severe eye and skin damage. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed. Avoid contamination of food. Combustible. Keep away from heat, sparks and open flames.</p>						<table border="1"> <tr> <td>HEALTH</td> <td>3</td> </tr> <tr> <td>FIRE</td> <td>2</td> </tr> <tr> <td>REACTIVITY</td> <td>0</td> </tr> </table> <p><b>HAZARD RATING</b> 0-Least 1-Slight 2-Moderate 3-High 4-Extreme</p>	HEALTH	3	FIRE	2	REACTIVITY	0
HEALTH	3													
FIRE	2													
REACTIVITY	0													

**HAZARDOUS COMPONENTS**

INGREDIENT	CAS NO	%	HAZARD
Quaternary Ammonium Compounds, Benzyl-C <sub>12</sub> -18-Alky) Dimethyl	68391-01-5	75-85	Corrosive to skin and eyes. Toxic by ingestion. Exposure limits not established.
Ethanol	64-17-5	5-15	Flammable. Skin and eye irritant. Teratogenic. OSHA PEL: 1000ppm (8-hour TWA)
Water	7732-18-5	5-15	None known. Exposure limits not established.

24-HOUR EMERGENCY PHONE: (614) 890-5319  
ANY QUESTIONS CONCERNING THIS MSDS CALL: (614) 764-8577

IV	HEALTH EFFECTS		<p><b>SKIN:</b> Can cause severe irritation, even burns, on prolonged contact.</p> <p><b>EYES:</b> Liquid causes severe irritation and may cause permanent damage. Concentrations &gt;1000ppm of ethanol vapors can also cause irritation.</p> <p><b>SWALLOWING:</b> Toxic. Results in severe damage to mucous membranes.</p> <p><b>BREATHING:</b> High concentrations (&gt;1000 ppm) of ethanol vapor can cause irritation of the respiratory tract, headache and, if continued, drowsiness, lassitude, etc.</p>
V	 FIRST AID	ON SKIN	<p>Immediately wash exposed area with soap and water for at least 15 minutes, then flush with water for at least 5 minutes. If reddening persists, or if open sores or blisters develop, see a physician. Remove contaminated clothing and laundry before re-use.</p>
		IN EYES	<p>Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get medical attention immediately. If physician is not immediately available, continue flushing with water. Do NOT use chemical antidote.</p>
		SWALLOWED	<p><del>Promptly drink a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.</del></p>
		BREATHE	<p>Move to fresh air. If breathing is difficult, administer oxygen and call a physician.</p>
VI	EMPLOYEE PROTECTION	RESPIRATORY	<p>A NIOSH/MSHA approved respirator with organic vapor canister or self-contained breathing apparatus is recommended if there is insufficient ventilation to maintain exposures below the PEL and/or level of overexposure.</p>
		HANDS	<p>Wear protective gloves such as: Neoprene or BUNA-N.</p>
		EYES	<p><del>Chemical splash goggles in compliance with OSHA regulations are advised.</del></p>
		OTHER	<p><del>To prevent repeated or prolonged skin contact, wear impervious clothing and boots.</del> Provide sufficient ventilation to maintain exposures below the PEL and/or level of overexposure.</p>

<b>VII</b>  <b>ICAL</b> <b>IA</b>  NOT PRODUCT SPECIFICATIONS	INITIAL BOILING POINT	IF LIQUID AT 68° F <b>COMPONENT</b> (10-15%)	173°F 760 mmHG	SPECIFIC GRAVITY	~0.95 @ 70°F	
	VAPOR PRESSURE	IF LIQUID AT 68° F OR WHICH SUBLIME <b>COMPONENT</b> (10-15%)	44 mmHG 68°F	PERCENT VOLATILES	INGREDIENT WITH INITIAL BOILING POINT BELOW 425 F	15-25
	VAPOR DENSITY	OF MOST VOLATILE COMPONENT <b>HEAVIER THAN AIR</b>		pH	1% in DI H <sub>2</sub> O	5.5-8
	PHYSICAL FORM	<b>Liquid @ 25°C</b>		SOLUBILITY IN H <sub>2</sub> O	<b>SOLUBLE</b>	
<b>VIII</b>  <b>REACTIVITY</b>	HAZARDOUS POLYMERIZATION	<b>CANNOT OCCUR</b>		STABILITY	<b>STABLE</b>	
	INCOMPATIBILITY	COMMON MATERIALS OR CONTAMINANTS WHICH WOULD RESULT IN A HAZARDOUS REACTION WITH THE PRODUCT <b>Strong oxidizing agents.</b>				
<b>IX</b>  <b>AND</b> <b>EXPLOSION</b> <b>DATA</b>	FLASH POINT	100°F ( PMCC )		EXPLOSION LIMIT <b>COMPONENT</b>	LOWER EXPLOSION LIMIT 3.3%	
	AUTOIGNITION TEMPERATURE (LOWEST VALUE OF COMPONENTS)	Unavailable			UPPER EXPLOSION LIMIT 19%	
	SPECIAL FIRE FIGHTING PROCEDURES	INDICATE EQUIPMENT TO PROTECT FIREFIGHTERS FROM TOXIC PRODUCTS/COMBUSTION. OR IF WATER IS NOT TO BE USED  <b>Wear full protective clothing and self-contained breathing apparatus with full facepiece. Hydrogen chloride may be generated in addition to ordinary combustion products.</b>				
	UNUSUAL FIRE AND EXPLOSION HAZARDS	<b>Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors or other ignition sources at locations distant from material handling point. Never use cutting or welding torch on or near drum (even empty); product (or even residue) can ignite explosively. All five gallon pails and larger metal containers should be grounded.</b>				
	EXTINGUISHING MEDIA	<b>DRY CHEMICAL    WATER FOG    ALCOHOL FOAM</b>				
	<b>X</b>  <b>SPILL</b> <b>HAZARD</b> <b>MEASURES</b>	Eliminate all ignition sources (flares, open flames including pilot lights, sparks, etc.). Persons not wearing protective equipment should be excluded from area of spill. Stop spill at source, dike area of spill to prevent spreading. Pump liquid to salvage tank. Absorb liquid on absorbent material and shovel into containers. This product is toxic to fish: prevent run-off to sewers, streams or other bodies of water.				

<b>XI</b>  WASTE DISPOSAL METHODS	<p>Incineration is the recommended disposal method for all chemical wastes. Material collected on absorbent material may be landfilled in accordance with all applicable regulations. This product, if disposed of, is an ignitable waste (waste #D001) under current RCRA regulations.</p>
<b>XII</b>  OTHER INFOR- MATION	<p>This product (or components, if a mixture) is not listed in IARC Monographs, the NTP Fourth Annual Report or the current ACGIH TLVs as a carcinogen or potential carcinogen. It is not regulated by OSHA as a carcinogen.</p> <p>NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.</p> <p>This product is an EPA registered pesticide. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.</p> <p>Do not contaminate water by cleaning of equipment or disposal of wastes. Keep out of lakes, streams, ponds or other bodies of water.</p> <p>TRANSPORTATION INFORMATION:</p> <p>DOT - Combustible Liquid NOS; NA 1993 Not regulated in containers of 110 gallons capacity or less.</p> <p>IMO - Flammable Liquid NOS (Contains Ethanol); Class 3.3; UN 1993; IMO Page 3142</p> <p>ICAO - Pesticides, Liquid, Toxic, Flammable NOS (Alkyl Dimethyl Benzyl Ammonium Chloride in Ethanol): Class 6.1; UN 2903; Packing Group III; Subsidiary Risk 3</p>

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with Sherrill or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.



## BUSHY RUN RESEARCH CENTER

R.D. 4, Mellon Road, Export, Pennsylvania 15632

Telephone (412) 733-5200  
Telecopier (412) 733-4804

### PROTOCOL AMENDMENT #1

**TITLE:** Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with Alkyl\* Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

\*C-12, 40%; C-14, 50%; C-16, 10%

**BRRRC PROJECT NUMBER:** 87-37-97105

**TESTING FACILITY:** Bushy Run Research Center  
RD 4, Mellon Road  
Export, PA 15632  
Attention: T. L. Neeper-Bradley  
(412) 733-5247

**SPONSOR:** ADBAC QUAT Joint Venture/  
Chemical Specialties Manufacturers Association  
Suite 1120  
1001 Connecticut Avenue, N.W.  
Washington, DC 20036

**SPONSOR'S REPRESENTATIVE:** Gerald P. Schoenig, Ph.D.  
54 Canterbury Road  
Charlottesville, VA 22901

### Reviewed and Approved by:

Bushy Run Research Center:

Teresa L. Neeper-Bradley 1/16/90  
Teresa L. Neeper-Bradley, Ph.D. Date  
Study Director, Reproductive and  
Developmental Toxicology Section

Darol E. Dodd 1/16/90  
Darol E. Dodd, Ph.D., DABT Date  
Assistant Director

Linda J. Caligiuri 1/18/90  
Linda J. Caligiuri, B.S. Date  
Group Leader, Good Laboratory  
Practices/Quality Assurance

F. R. Frank 1/18/90  
Fred R. Frank, Ph.D. Date  
Director

Sponsor Representative:

G. P. Schoenig Jan. 19, 1990  
Gerald P. Schoenig, Ph.D. Date

1756P-3

Bushy Run Research Center  
A Joint Mellon Institute—Union Carbide Corporation Operation

The protocol is amended as follows:

1. Location of Protocol Change: Title Page, TESTING FACILITY (lines 4 and 5, page 1)

Description of Protocol Change:

From:

"TESTING FACILITY: Bushy Run Research Center  
RD 4, Mellon Road  
Export, PA 15632  
Attention: R. W. Tyl  
(412) 733-5277"

To:

"TESTING FACILITY: Bushy Run Research Center  
RD 4, Mellon Road  
Export, PA 15632  
Attention: T. L. Neeper-Bradley  
(412) 733-5247"

Rationale: Dr. R. W. Tyl served as Study Director throughout the in-life phase of the study until June 9, 1989. Dr. T. L. Neeper-Bradley was appointed Study Director as of June 9, 1989.

2. Location of Protocol Change: Title Page, Reviewed and Approved by: (lines 1-4, page 1)

Description of Protocol Change:

From:

"Bushy Run Research Center:

\_\_\_\_\_  
Rochelle W. Tyl, Ph.D., DABT Date  
Study Director/Manager, Reproductive  
and Developmental Toxicology Section"

\_\_\_\_\_  
Linda J. Calisti, B.S. Date  
Group Leader, Good Laboratory  
Practices/Quality Assurance

\_\_\_\_\_  
Fred R. Frank, Ph.D. Date  
Director

Sponsor Representative:

\_\_\_\_\_  
Gerald P. Schoenig, Ph.D. Date"

To:

"Bushy Run Research Center:

Teresa L. Neeper-Bradley, Ph.D.      Date  
Study Director, Reproductive and  
Developmental Toxicology Section"

Darol E. Dodd, Ph.D., DABT      Date  
Assistant Director

Linda J. Calisti, B.S.      Date  
Group Leader, Good Laboratory  
Practices/Quality Assurance

Fred R. Frank, Ph.D.      Date  
Director

Sponsor Representative:

Gerald P. Schoenig, Ph.D.      Date"

Rationale: See rationale for item number 1. In addition, Dr. D. E. Dodd  
has been appointed as a signatory as Assistant Director overseeing the  
Reproductive and Developmental Toxicology Section.

3. Location of Protocol Change: II, GENERAL, E. Personnel (lines 1-12, Page 2  
and lines 7-10, Page 3)

Description of Protocol Change:

From:

"Study Director:

R. W. Tyl, Ph.D., DABT  
Manager, Reproductive and Developmental  
Toxicology

Reproductive and  
Developmental Toxicology  
Personnel:

R. R. Altman  
B. L. Butler, AHT, AALAS Cert. II  
M. A. Copeman, A.A., B.A.  
D. L. Fait, AALAS Cert. II  
L. C. Fisher, B.S.  
M. F. Kubena, B.S., AALAS Cert. II  
D. J. Tarasi, AHT, A.S., AALAS Cert. I"

"Quality Assurance Personnel: L. J. Calisti, B.S., AALAS Cert. III  
Group Leader

J. R. Bernard, B.S.  
J. H. Coleman, B.S., AALAS Cert. III"

To:

"Study Director:

T. L. Neeper-Bradley, Ph.D.  
Reproductive and Developmental  
Toxicology

Reproductive and  
Developmental Toxicology  
Personnel:

R. W. Tyl, Ph.D., DABT  
R. R. Altman  
T. R. Brownfield, B.S.  
B. L. Butler, AHT, AALAS Cert. II  
M. A. Copeman, A.A., B.A.  
D. L. Fait, AALAS Cert. II  
L. C. Fisher, B.S., AALAS Cert. III  
L. J. Fosnight, B.S., AALAS Cert. II  
M. F. Kubena, B.S., AALAS Cert. III  
D. J. Tarasi, AHT, A.S., AALAS Cert. I"

"Quality Assurance Personnel: L. J. Calisti, B.S., AALAS Cert. III  
Group Leader

J. R. Bernard, B.S.  
J. H. Coleman, B.S., AALAS Cert. III  
B. E. Thomas, B.S."

Rationale: See rationale for item number 1. In addition, during the course of the study T. R. Brownfield and L. J. Fosnight became permanent employees of the Reproductive and Developmental Toxicology staff, L. C. Fisher and M. F. Kubena received their AALAS Certification III, and B. E. Thomas became a permanent employee of the Quality Assurance Unit.

PATH/esk/1756P-3

01-16-90



REPORT AMENDMENT

Study Title

Two-Generation Reproduction Study in Sprague Dawley (CD<sup>®</sup>) Rats with  
Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet  
Guideline No. 83-4

MRID No. 41385001

Author

John P. Van Miller, Ph.D., DABT  
Laboratory Director, Bushy Run Research Center

Final Report Date

January 30, 1990

Amended Report Date

April 14, 1995

Sponsor

ADBAC Quat Joint Venture/  
Chemical Specialties Manufacturers Association  
1913 Eye Street N.W.  
Washington, DC 20006

Performing Laboratory

Bushy Run Research Center  
6702 Mellon Road  
Export, PA 15632-8902

Laboratory Project ID

52-524

Report Amendment

Two-Generation Reproduction Study with ADBAC in Rats (52-524)

Page 2 of 4

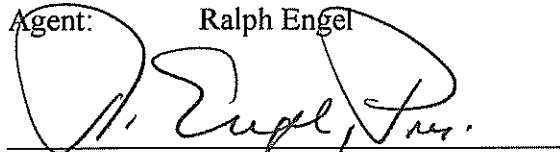
STATEMENT OF NO DATA CONFIDENTIALITY CLAIMS

No claim of confidentiality is made for any information contained in this document on the basis of its falling within the scope of FIFRA Section 10 (d)(1)(A), (B) or (C).

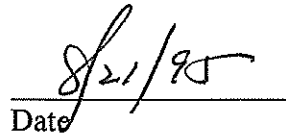
Company: ADBAC Quat Joint Venture/Chemical Specialties Manufacturers Association

Agent:

Ralph Engel

A handwritten signature in black ink, appearing to read "R. Engel, Pres.", written over a horizontal line.

President, Chemical Specialties  
Manufacturers Association

A handwritten date "8/21/95" in black ink, written over a horizontal line.

Date

### GOOD LABORATORY PRACTICE COMPLIANCE STATEMENT

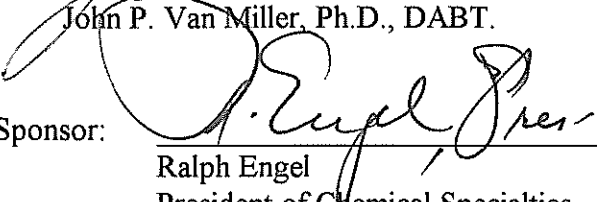
This report amendment, documenting removal of all data for this study from Bushy Run Research Center to EPL Archives, meets Good Laboratory Practice Standards, 40 CFR Part 160.

Laboratory Director  
for Study Director:

  
John P. Van Miller, Ph.D., DABT.

7-31-95  
Date

Study Submitter/Sponsor:

  
Ralph Engel  
President of Chemical Specialties  
Manufacturers Association

8/21/95  
Date

Report Amendment

Two-Generation Reproduction Study with ADBAC in Rats (52-524)

Page 4 of 4

**BUSHY RUN RESEARCH CENTER**

6702 Mellon Road, Export, Pennsylvania 15632-8902

LABORATORY PROJECT ID

52-524 - Amendment

STUDY TITLE

Two-Generation Reproduction Study in Sprague-Dawley (CD®) Rats with Alkyl Dimethyl Benzyl Ammonium Chloride (ADBAC) Administered in the Diet

AMENDMENT DATE

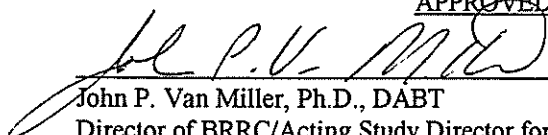
April 14, 1995

Location of Report Amendment: RETENTION OF RECORDS

Description of Report Amendment: The data, documentation, the protocol and any amendments, any specimens and reserve chemical samples, and the final report have been moved to EPL Archives, Inc. (P.O. Box 1253, Sterling, VA).

Rationale: Due to the closing of the Bushy Run Research Center testing facility, the archived records were moved at the request of the Sponsor. This amendment was prepared and signed based on the requirements of the Environmental Protection Agency as outlined in correspondence from Richard Colbert, Office of Compliance, to Union Carbide Corporation received 2/13/95. This procedure is also consistent with guidance from Mr. Stan W. Woolen, Bioresearch Monitoring Program Coordinator, Food and Drug Administration, received 12/2/94.

APPROVED BY

  
John P. Van Miller, Ph.D., DABT  
Director of BRRC/Acting Study Director for the Purpose of this Amendment

4-14-95

Date