C Number:	R10997
Study Gender:	Both
PWG Approval Date	See web page for date of PWG Approval

F0 Male

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
Disposition Summary				
Animals Initially In Study	**23**	**23**	**23**	**23**
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (SD 139 - 141)	**23**	**23**	**23**	**23**
Number of Animals Examined	**23**	**10**	**6**	**23**
ALIMENTARY SYSTEM				
LIVER	(23)	(0)	(0)	(23)
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
ADRENAL GLAND	(23)	(0)	(0)	(23)
PITUITARY GLAND	(22)	(0)	(0)	(22)
GENERAL BODY SYSTEM				
FAT	(0)	(0)	(0)	(1)
GENITAL SYSTEM				
DORSAL PROSTATE	(23)	(0)	(0)	(23)
EPIDIDYMIS	(23)	(0)	(0)	(23)
PREPUTIAL GLAND	(10)	(10)	(4)	(9)
TESTIS	(23)	(0)	(0)	(23)
VENTRAL PROSTATE	(23)	(0)	(0)	(23)
HEMATOLYMPHOID SYSTEM				
THYMUS	(23)	(0)	(0)	(23)

F0 Male

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
INTEGUMENTARY SYSTEM				
SKIN	(0)	(0)	(1)	(1)
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				
URINARY SYSTEM				
KIDNEY	(23)	(0)	(0)	(23)

F0 Female

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
Disposition Summary				
Animals Initially In Study	**23**	**23**	**23**	**23**
Early Deaths				
Euthanized, moribund	**2**	**2**	**2**	**1**
Unscheduled Sacrifice			**1**	
Scheduled Deaths				
Scheduled sacrifice, terminal (SD 176 - 177)	**21**	**21**	**20**	**22**
Number of Animals Examined	**23**	**3**	**4**	**23**
ALIMENTARY SYSTEM				
LIVER	(23)	(0)	(1)	(23)
BILE DUCT; CHOLANGIOMA				1 (4.3%)
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
ADRENAL GLAND	(23)	(0)	(0)	(23)
THYROID GLAND	(23)	(0)	(0)	(23)
GENERAL BODY SYSTEM				
FAT	(1)	(0)	(0)	(0)
GENITAL SYSTEM				
CLITORAL GLAND	(1)	(0)	(0)	(1)
OVARY	(23)	(0)	(0)	(23)
UTERUS	(21)	(0)	(0)	(23)
VAGINA	(21)	(0)	(0)	(23)

F0 Female

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
HEMATOLYMPHOID SYSTEM				
SPLEEN	(0)	(0)	(2)	(1)
THYMUS	(23)	(0)	(0)	(23)
INTEGUMENTARY SYSTEM				
MAMMARY GLAND	(2)	(3)	(2)	(0)
ADENOCARCINOMA	1 (50%)		1 (50%)	
FIBROADENOMA	1 (50%)	1 (33.3%)	1 (50%)	
SKIN	(1)	(0)	(0)	(0)
SKIN, ABDOMINAL	(0)	(0)	(0)	(1)
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				
URINARY SYSTEM				
KIDNEY	(23)	(0)	(1)	(23)

F1 Male : F1c NonParent Males

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
Disposition Summary				
Animals Initially In Study	**45**	**31**	**39**	**40**
Early Deaths				
Euthanized, moribund				**1**
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 90 - 92)	**45**	**31**	**39**	**39**
Number of Animals Examined	**45**	**31**	**39**	**40**
Total number litters	**17**	**13**	**17**	**16**
ALIMENTARY SYSTEM				
LIVER	(45)	(1)	(2)	(40)
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
ADRENAL GLAND	(45)	(0)	(1)	(40)
PITUITARY GLAND	(45)	(31)	(39)	(40)
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
COWPERS GLAND	(44)	(31)	(39)	(39)
DORSAL PROSTATE	(45)	(31)	(39)	(38)
EPIDIDYMIS	(45)	(31)	(39)	(40)
LEVATOR ANI PLUS BULBOCAVERNOSUS MUSCLE	(45)	(0)	(2)	(39)
PREPUTIAL GLAND	(2)	(0)	(1)	(1)
TESTIS	(45)	(31)	(39)	(39)
VENTRAL PROSTATE	(45)	(31)	(39)	(40)

F1 Male : F1c NonParent Males

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
HEMATOLYMPHOID SYSTEM				
SPLEEN	(45)	(0)	(1)	(40)
THYMUS	(45)	(0)	(0)	(40)
INTEGUMENTARY SYSTEM				
DIGIT	(0)	(0)	(0)	(1)
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				
URINARY SYSTEM				
KIDNEY	(45)	(3)	(3)	(40)
RENAL TUBULE; ADENOMA				1 (2.5%) [1]

F1 Female : F1c NonParent Female

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
Disposition Summary				
Animals Initially In Study	**28**	**32**	**40**	**32**
Early Deaths				
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 90 - 92)	**28**	**32**	**40**	**32**
Number of Animals Examined	**28**	**5**	**3**	**32**
Total number litters	**15**	**4**	**3**	**13**
ALIMENTARY SYSTEM				
LIVER	(28)	(0)	(1)	(32)
MESENTERY	(2)	(1)	(0)	(0)
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
ADRENAL GLAND	(28)	(0)	(1)	(32)
PITUITARY GLAND	(28)	(0)	(0)	(32)
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
OVARY	(28)	(0)	(0)	(32)
UTERUS	(28)	(1)	(0)	(32)
HEMATOLYMPHOID SYSTEM				
SPLEEN	(28)	(0)	(1)	(32)
THYMUS	(28)	(0)	(0)	(32)

F1 Female : F1c NonParent Female

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
INTEGUMENTARY SYSTEM				
DIGIT	(0)	(1)	(0)	(1)
MAMMARY GLAND	(28)	(0)	(0)	(32)
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				
URINARY SYSTEM				
KIDNEY	(28)	(1)	(1)	(32)
NEPHROBLASTOMA				1 (3.1%) [1]

F1 Male : F1c Parental Males

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
Disposition Summary				
Animals Initially In Study	**40**	**40**	**40**	**40**
Early Deaths				
Unscheduled Sacrifice			**3**	
Scheduled Deaths				
Scheduled sacrifice, terminal (PND 213 - 223)	**40**	**40**	**37**	**40**
Number of Animals Examined	**40**	**40**	**40**	**40**
Total number litters	**21**	**20**	**19**	**18**
ALIMENTARY SYSTEM				
LIVER	(40)	(0)	(3)	(40)
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
ADRENAL GLAND	(40)	(0)	(3)	(40)
PITUITARY GLAND	(40)	(40)	(40)	(40)
THYROID GLAND	(40)	(0)	(3)	(40)
GENERAL BODY SYSTEM				
None				

F1 Male : F1c Parental Males

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
GENITAL SYSTEM				
COWPERS GLAND	(40)	(40)	(40)	(40)
DORSAL PROSTATE	(40)	(0)	(3)	(40)
EPIDIDYMIS	(40)	(40)	(40)	(39)
PREPUTIAL GLAND	(2)	(1)	(2)	(8)
SEMINAL VESICLE	(40)	(0)	(3)	(40)
TESTIS	(40)	(40)	(40)	(39)
VENTRAL PROSTATE	(40)	(40)	(40)	(40)
HEMATOLYMPHOID SYSTEM				
LYMPH NODE	(0)	(0)	(0)	(1)
THYMUS	(40)	(0)	(3)	(39)
INTEGUMENTARY SYSTEM				
SKIN	(0)	(0)	(0)	(1)
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				
URINARY SYSTEM				
KIDNEY	(40)	(1)	(3)	(40)

F1 Female : F1c Parental Females

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
Disposition Summary				
Animals Initially In Study	**40**	**40**	**40**	**40**
Early Deaths				
Euthanized, moribund	**1**		**4**	
Found Dead	**1**		**1**	
Scheduled Deaths				
Scheduled sacrifice, terminal (LD 21, PND 232 - 237)	**38**	**40**	**35**	**40**
Number of Animals Examined	**40**	**7**	**9**	**40**
Total number litters	**20**	**7**	**9**	**18**
ALIMENTARY SYSTEM				
LIVER	(40)	(2)	(6)	(40)
MESENTERY	(0)	(1)	(1)	(0)
CARDIOVASCULAR SYSTEM				
HEART	(0)	(0)	(1)	(0)
ENDOCRINE SYSTEM				
ADRENAL GLAND	(40)	(0)	(5)	(40)
PHEOCHROMOCYTOMA; BENIGN	1 (2.5%) [1]			
PITUITARY GLAND	(40)	(0)	(5)	(40)
THYROID GLAND	(40)	(0)	(5)	(40)
GENERAL BODY SYSTEM				
None				

F1 Female : F1c Parental Females

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
GENITAL SYSTEM				
CERVIX	(40)	(0)	(5)	(40)
CLITORAL GLAND	(3)	(1)	(1)	(0)
OVARY	(40)	(0)	(5)	(40)
UTERUS	(39)	(1)	(5)	(40)
VAGINA	(40)	(0)	(5)	(40)
HEMATOLYMPHOID SYSTEM				
LYMPH NODE, AXILLARY	(1)	(0)	(1)	(0)
LYMPH NODE, MANDIBULAR	(0)	(0)	(1)	(0)
SPLEEN	(40)	(0)	(5)	(40)
THYMUS	(39)	(0)	(4)	(40)
INTEGUMENTARY SYSTEM				
MAMMARY GLAND	(38)	(2)	(6)	(40)
ADENOCARCINOMA	1 (2.6%) [1]		1 (16.7%) [1]	
FIBROADENOMA		1 (50%) [1]	1 (16.7%) [1]	1 (2.5%) [1]
SKIN	(1)	(0)	(0)	(0)
SKIN, SUBCUTANEOUS TISSUE	(0)	(0)	(1)	(0)
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				

F1 Female : F1c Parental Females

	Treatment Groups (ppm)			
	0	**1000**	**5000**	**10000**
URINARY SYSTEM				
KIDNEY	(40)	(0)	(6)	(40)
NEPHROBLASTOMA				1 (2.5%) [1]

LEGEND

Number of animals examined for each tissue shown in parentheses. If none of the animals examined have the specific lesion then there is a blank for that dose group for that specific lesion. The exception to this is if statistical significance is found for a lesion and the control group has no animals with the lesion then a 0 is included for the control group on the table for that lesion.

Number of animals with observation reported with percent incidence in parentheses

Number of litters with observations shown in square brackets for F1 and F2 animals. F1 litter incidence based on the number of F0 dams; F2 litter incidence based on number of F1 dams.

Trend significance is reported only for those organs that were fully examined in the control group plus two or more other dose groups. For organs that were fully examined in just the control and one other dose group, only the pairwise significance is reported.

Trend and pairwise significance levels are determined using one-sided tests.

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

Non-pregnant females from the F0 and F1 generations are included in the analysis.

Statistical analysis for the F0 animals was performed by Cochran-Armitage test with poly-3 adjustment for both trend and pairwise tests.

Statistical analysis for the F1 Non-parental and F2 animals was performed by Cochran-Armitage test with a Rao-Scott modification for the random effect due to litter.

Statistical analysis for the F1 Parental animals was performed by Cochran-Armitage test with a poly-3 adjustment for age and a Rao-Scott modification for the random effect due to litter.

* Statistically significant at P <= 0.05

** Statistically significant at P <= 0.01

** END OF REPORT **