

2-フェノキシエタノールのラットを用いた
経口投与によるがん原性試験（混水試験）報告書

試験番号：0497

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APPENDIX A 1

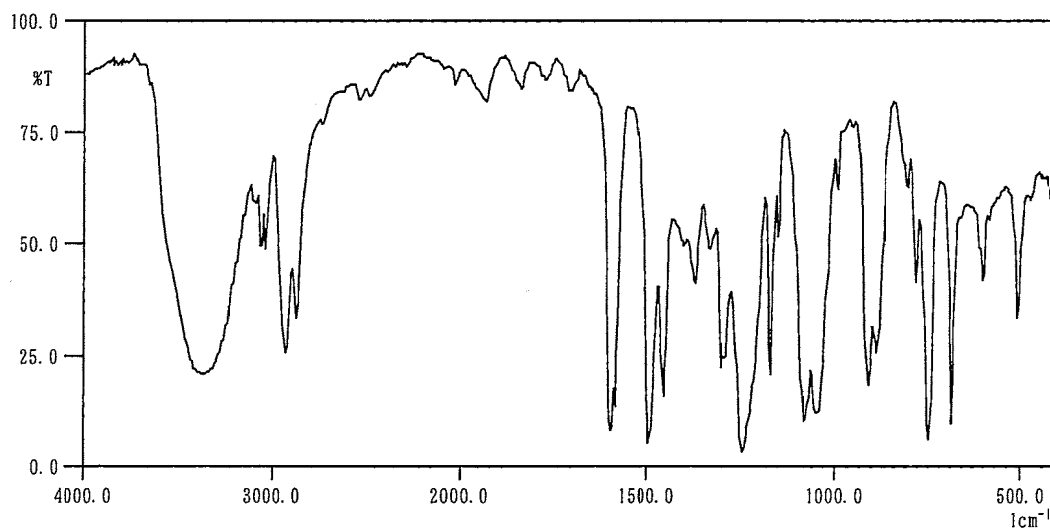
IDENTITY OF 2-PHENOXYETHANOL IN THE 2-YEAR DRINKING WATER STUDY

Infrared Spectrometry

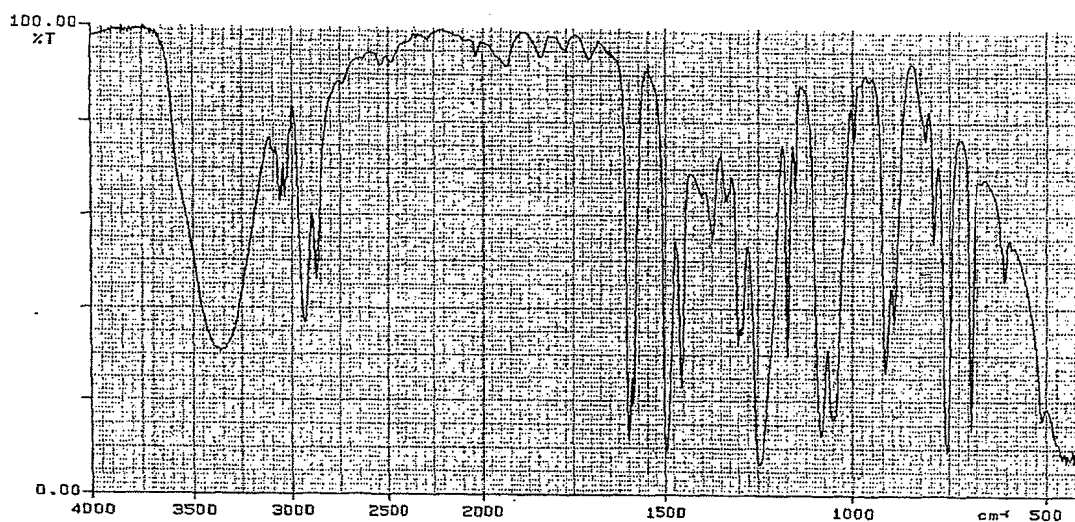
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Conclusion: The test substance was identified as 2-phenoxyethanol by mass spectrum and infrared spectrum.

B. Lot No. : PKF5373

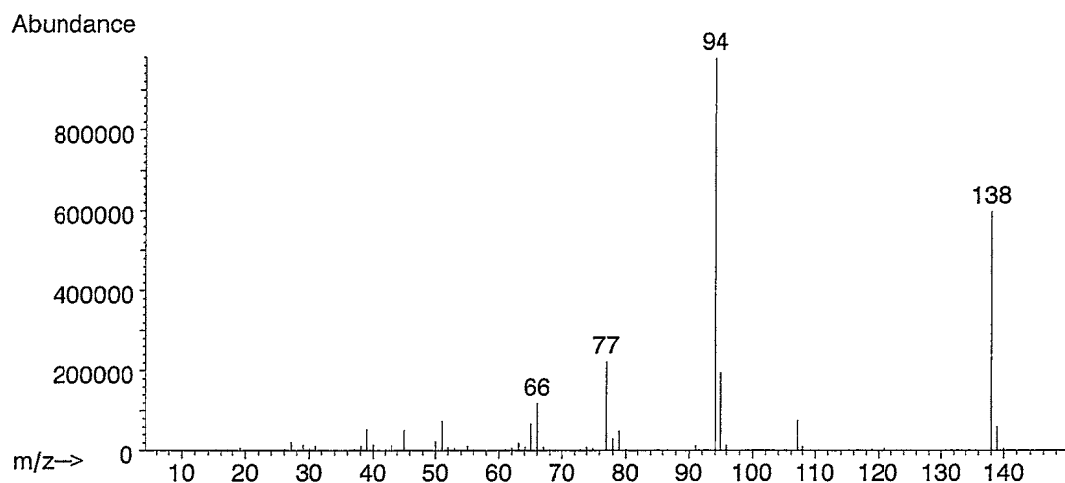
1. Spectral Data

Mass Spectrometry

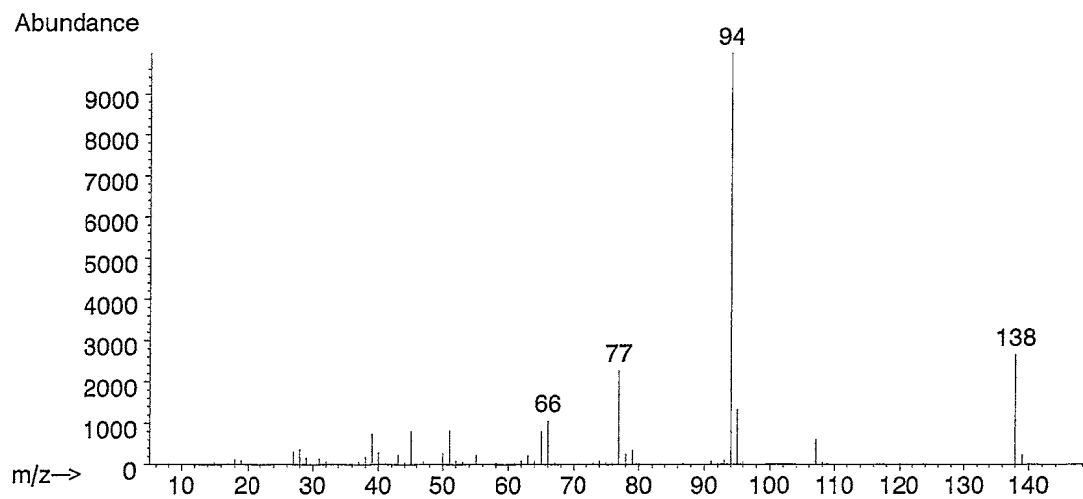
Instrument : Hewlett Packard 5989B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

Result: The mass spectrum was consistent with literature spectrum.

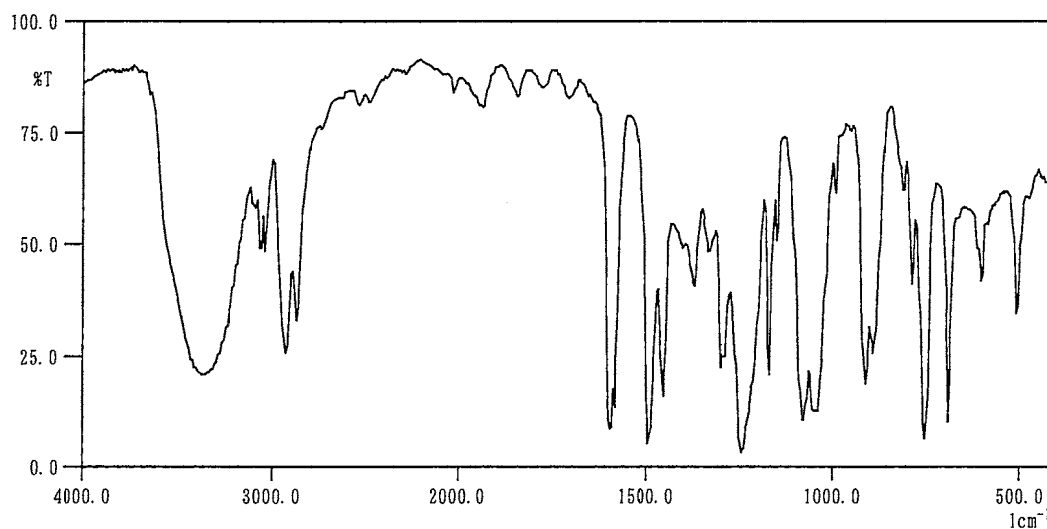
(*McLafferty FW. 1994. Wiley Registry of Mass Spectral Data, 6th ed.
New York:John Wiley and Sons.)

Infrared Spectrometry

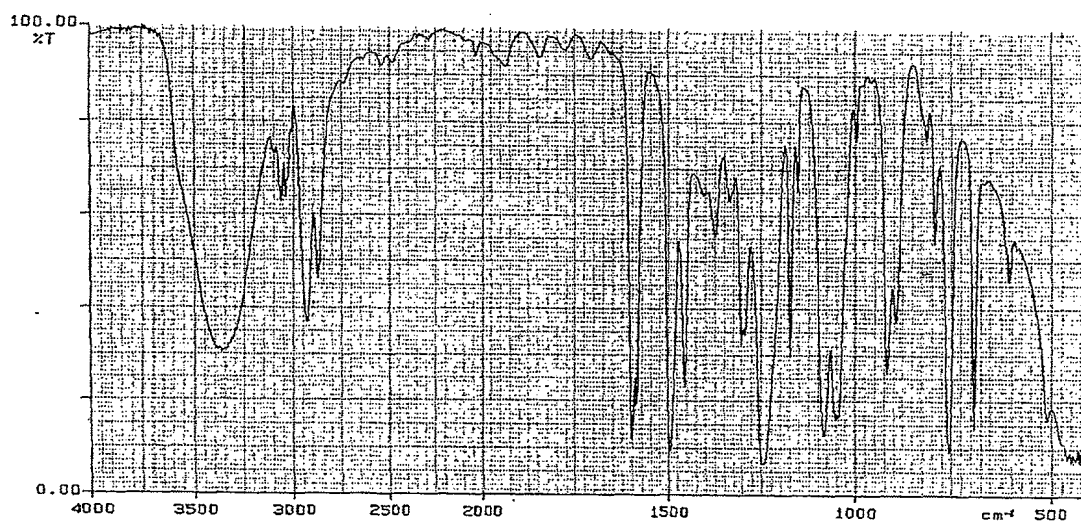
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Conclusion: The test substance was identified as 2-phenoxyethanol by mass spectrum and infrared spectrum.

APPENDIX A 2

STABILITY OF 2-PHENOXYETHANOL IN THE 2-YEAR DRINKING WATER STUDY

STABILITY OF 2-PHENOXYETHANOL IN THE 2-YEAR DRINKING WATER STUDY

Test Substance : 2-Phenoxyethanol (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : PKM4201

1. High Performance Liquid Chromatography

Instrument : Shimadzu LC-10 High Performance Liquid Chromatograph

Column : TSK-GEL ODS-80TM (4.6 mm ϕ \times 15 cm)

Column Temperature: 40 °C

Flow Rate : 1 mL/min

Mobile Phase : Acetonitrile : Distilled Water = 4 : 6

Detector : UV (271 nm)

Injection Volume : 10 μ L

Date analyzed	Peak No.	Retention Time (min)	Area (%)
2003.06.19	1	3.488	100
2004.05.17	1	3.457	100

Result: High performance liquid chromatography indicated one major peak (peak No.1) analyzed on 2003.6.19 and one major peak (peak No.1) analyzed on 2004.5.17. No new trace impurity peak in the test substance analyzed on 2004.5.17 was detected.

2. Conclusion: The test substance was stable for the period that the test substance had been used for the study.

B. Lot No. : PKF5373

1. High Performance Liquid Chromatography

Instrument : Shimadzu LC-10 High Performance Liquid Chromatograph

Column : TSK-GEL ODS-80TM (4.6 mm ϕ \times 15 cm)

Column Temperature: 40 °C

Flow Rate : 1 mL/min

Mobile Phase : Acetonitrile : Distilled Water = 4 : 6

Detector : UV (271 nm)

Injection Volume : 10 μ L

Date analyzed	Peak No.	Retention Time (min)	Area (%)
2004.05.10	1	3.454	100
2005.07.22	1	3.459	100

Result: High performance liquid chromatography indicated one major peak (peak No.1) analyzed on 2004.5.10 and one major peak (peak No.1) analyzed on 2005.7.22. No new trace impurity peak in the test substance analyzed on 2005.7.22 was detected.

2. Conclusion: The test substance was stable for the period that the test substance had been used for the study.

APPENDIX A 3

CONCENTRATION OF 2-PHENOXYETHANOL IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

CONCENTRATION OF 2-AMINOETHANOL IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

Analytical Method : The samples were analyzed by high performance liquid chromatography.

Instrument : Shimadzu LC-10 High Performance Liquid Chromatograph

Column : TSK-GEL ODS-80TM (4.6 mm ϕ \times 15 cm)

Column Temperature: 40 °C

Flow Rate : 1 mL/min

Mobile Phase : Acetonitrile : Distilled Water = 4 : 6

Detector : UV (271 nm)

Injection Volume : 10 μ L

Date Analyzed	Target Concentration		
	2500 ^a	5000	10000
2003.06.20	2500 ^b (100) ^c	5130 (103)	10200 (102)
2003.09.12	2520 (101)	5100 (102)	10200 (102)
2003.12.05	2560 (102)	5140 (103)	10200 (102)
2004.02.27	2410 (96.4)	4900 (98.0)	9730 (97.3)
2004.05.21	2510 (100)	5030 (101)	9950 (99.5)
2004.08.13	2520 (101)	5070 (101)	10100 (101)
2004.11.05	2510 (100)	5000 (100)	10000 (100)
2005.01.28	2560 (102)	5180 (104)	10400 (104)
2005.04.22	2480 (99.2)	5000 (100)	10000 (100)

^a ppm

^b ppm (Mean measured concentration.)

^c % (Mean measured concentration/target concentration \times 100.)

APPENDIX A 4

STABILITY OF 2-PHENOXYETHANOL IN FORMULATED WATER

STABILITY OF 2-AMINOETHANOL IN FORMULATED WATER

Analytical Method : The samples were analyzed by high performance liquid chromatography.

Instrument : Shimadzu LC-10 High Performance Liquid Chromatograph

Column : TSK-GEL ODS-80TM (4.6 mm ϕ \times 15 cm)

Column Temperature: 40 °C

Flow Rate : 1 mL/min

Mobile Phase : Acetonitrile : Distilled Water = 4 : 6

Detector : UV (271 nm)

Injection Volume : 10 μ L

Date Analyzed	Target Concentration	
	100 ^a	25000
2002.05.15	97.3 (100) ^b	24600 (100)
2002.05.20 ^c	98.7 (101)	25700 (104)

^a ppm^b % (Percentage was based on the concentration at the date of preparation.)^c Animal room samples

APPENDIX B 1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 1

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 2

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 3

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 4

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOTLED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	0	0	1	1	1	1	1	1	1	1	2	2	2	4
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	5000ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	2
	2500ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
DEATH	Control	4	5	7	7	7	7	7	7	7	8	8	9	9	9
	2500ppm	3	3	3	3	3	3	4	4	4	4	4	4	4	4
	5000ppm	1	1	1	2	2	2	2	2	2	2	3	3	3	3
	10000ppm	2	2	2	2	2	2	2	2	2	2	4	5	5	6
MORIBUND SACRIFICE	Control	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	2500ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	1	0	0	0	0	0	1	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	9	9	10	10	11	11
	2500ppm	4	4	5	7	8	8
	5000ppm	4	4	4	5	5	5
	10000ppm	6	8	9	9	9	9
MORIBUND SACRIFICE	Control	3	3	3	3	3	3
	2500ppm	2	2	3	4	4	5
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	2500ppm	0	0	1	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0
	2500ppm	0	0	1	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	1	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
PILOERECTION	Control	1	2	1	1	1	1
	2500ppm	1	1	3	1	1	1
	5000ppm	0	0	0	1	1	1
	10000ppm	3	2	1	1	1	1

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	3	3	5	5	5	5	5	5	7	7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	10000ppm	7	7	7	7	4	4	7	9	8	9	11	12	12	12
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	1	1	1	1	1	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7												
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	15	15	15	15	15	15	15	15	15	14	14	14	14	14	14
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	2	2	2	2	2	2	2	3	2	0
	10000ppm	14	14	14	17	17	18	18	17	16	16	16	16	16	13
EXOPHTHALMOS	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	1	1	2	2	2	3
	10000ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	10000ppm	12	12	12	10	10	14	13	13	13	13	15	15	15	14	13
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	2	3	3	3	3	3	3	3	3
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	3	3	4	3	3	2	2	2	2	2	2	2	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	1	1	2	2	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	2	2	2	2	1	0	0	0	0	0	0	0	0
	10000ppm	13	19	19	16	16	16	16	12	11	13	13	13	14	14
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	2500ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	5000ppm	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1	1	0	0	0	0	0	0	0
	5000ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	3	3	3	3	3	3	3	5	6	6	6	6	7	5
	2500ppm	0	0	0	0	0	0	0	0	0	0	2	2	2	2
	5000ppm	3	2	2	2	3	2	2	2	2	2	2	2	3	3
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
SOILED PERI-GENITALIA	Control	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	5000ppm	0	0	0	1	1	1	1	1	1	2	1	1	1	0
	10000ppm	14	15	15	19	20	17	17	17	17	19	17	16	16	15
EXOPHTHALMOS	Control	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	4	3	4	4	4	4	5	5	7	7	7	7	8	8
	2500ppm	1	1	1	1	1	1	1	1	2	2	3	3	3	3
	5000ppm	3	3	4	4	4	4	4	4	4	4	4	4	4	4
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	2	2	2	2	2	2	2	2	2	2	2	1	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	6	5	6	5	6	6	6	6	7	7	7	6	6	7
	2500ppm	2	2	2	2	5	5	3	4	5	5	5	5	5	5
	5000ppm	4	4	5	5	6	6	7	7	7	7	7	7	7	7
	10000ppm	2	2	2	2	4	4	4	4	4	4	3	3	4	4
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	2	2	1	0	0	0	0	0	1	1	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
SOILED PERI-GENITALIA	Control	1	1	0	0	0	0
	2500ppm	1	2	1	0	0	1
	5000ppm	1	1	1	0	0	1
	10000ppm	17	16	14	13	15	15
EXOPHTHALMOS	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	2	2	2	2	2	2
	10000ppm	0	0	0	0	0	0
CATARACT	Control	8	8	8	8	8	8
	2500ppm	3	3	3	4	4	4
	5000ppm	4	4	4	4	4	4
	10000ppm	1	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	2	2	2	1	1	1
	10000ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	7	7	6	6	6	6
	2500ppm	6	6	7	4	5	4
	5000ppm	7	8	8	7	7	7
	10000ppm	4	3	2	2	3	3
INTERNAL MASS	Control	0	0	0	1	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. NOSE	Control	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	1	1	1	1	1	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	1	1	1	1	0	0
M. ABDOMEN	Control	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		71-7	72-7	73-7												
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. PERI EAR	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	1	1	2	2	2	2	2	2	2	2	2	3
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	1	1	1	1	1	1	1	1	2	2
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	1	1	1	1	2	2	2	2	2	2
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	5000ppm	1	1	2	2	3	3	3	3	3	3	3	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	1	1	1	1	1	1	2	2	2	2	1	1	1	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. PERI EAR	Control	0	0	0	0	0	0
	2500ppm	1	1	1	0	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0
	2500ppm	0	0	1	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. BREAST	Control	3	3	2	2	2	2
	2500ppm	1	1	1	0	0	0
	5000ppm	1	2	2	2	2	2
	10000ppm	2	1	1	1	1	1
M. ABDOMEN	Control	1	1	1	1	1	1
	2500ppm	2	2	2	1	1	1
	5000ppm	1	1	1	1	1	1
	10000ppm	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	2	2	2	2	2	2
	2500ppm	2	2	2	2	2	1
	5000ppm	3	3	3	2	2	2
	10000ppm	0	0	0	0	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	1	1	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	3	3	3	3	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7												
M. GENITALIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	1
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	1	1	1	1	1
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	3	3	3		3	3	3	3	3	3	3	3	3	3	3
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	3	4	4	4	4	4	4	4	4	4	4	4	4	4
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	1	1	1	1	1	1	1	1	1	1	1	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ULCER	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	4	3	3	3	3	3	3	3	3	3	3	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	1	1	2	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	2	2	1	1	1	1	1	1	1	1
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	1	1	1	1	0	0	0	1	0	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	1	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	2	1	1	2
ULCER	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	2	2	2	2	2	2	2	2	2	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	2	2	0	0	0	0	1	1	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	1	0	0	0	0	0	0	1	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. GENITALIA	Control	0	0	0	0	0	0
	2500ppm	0	0	1	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1
M. TAIL	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
ANEMIA	Control	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0
	5000ppm	1	0	0	0	1	1
	10000ppm	2	3	0	0	0	1
ULCER	Control	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
CRUSTA	Control	1	1	1	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
TORTICOLLIS	Control	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0
	5000ppm	3	3	3	3	3	2
	10000ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	1	0	0	0	0
	2500ppm	0	2	2	1	1	1
	5000ppm	0	0	0	0	1	1
	10000ppm	1	2	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	2500ppm	50	50	50	50	50	50	50	49	50	50	50	50	50	50
	5000ppm	50	50	50	50	50	50	50	50	50	48	49	49	49	49
	10000ppm	50	50	50	50	47	47	44	45	45	45	45	45	43	43

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STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	2	1	1	1	1	1	1	1	1	1	1	1
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	49	49	48	48	48	48	48	49	49	49	49
	2500ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	5000ppm	49	49	49	48	48	48	48	47	47	47	47	47	47	47
	10000ppm	43	43	42	43	46	46	43	41	42	41	39	38	38	38

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7												
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	48	48	48	48	47	47	47
	2500ppm	50	50	50	50	49	50	50	50	50	50	50	48	49	49	49
	5000ppm	47	47	47	47	47	46	46	46	44	45	44	44	44	44	44
	10000ppm	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	47	47	47	47	47	47	47	47	47	47	47
	2500ppm	50	50	50	50	50	50	50	50	50	50	50	50	49	49
	5000ppm	44	44	44	44	43	43	43	43	43	43	42	41	42	44
	10000ppm	36	36	36	33	33	32	32	32	33	34	34	34	34	37

(HAN190)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	2	2	1	1	1	1	1	1	1	1	1	1	1	1
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	47	47	47	46	45	45	45	44	44	44	44
	2500ppm	49	49	49	48	48	48	48	48	48	48	48	48	48	48
	5000ppm	44	44	42	42	42	42	43	43	43	43	43	43	43	44
	10000ppm	38	38	38	40	40	36	37	37	37	35	34	34	34	35

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	1	0	1	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	0	0	0	0	0	1	0	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	1	0	1	3
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	5000ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
NON REMARKABLE	Control	44	44	43	43	43	43	43	41	40	40	37	36	35	33
	2500ppm	47	47	47	47	46	46	46	46	46	46	43	43	43	43
	5000ppm	43	41	41	41	40	42	42	43	43	43	43	43	42	40
	10000ppm	35	29	29	32	32	32	32	36	37	35	35	35	32	32

(IAN190)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 39

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
RED URINE	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2500ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	2	3	2	1	1	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	2	2	1	0	0	0	1	0	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	5000ppm	1	1	1	0	0	0	0	0	1	1	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	1	0	0	1	0
OLIGO-STOOL	Control	3	2	1	0	0	0	1	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	0	0	0	1	0	0	0	0	1
	5000ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	1	1	0	1	1
NON REMARKABLE	Control	33	33	29	31	31	30	29	29	28	28	27	25	24	23
	2500ppm	42	42	42	41	39	39	40	38	35	37	35	36	36	35
	5000ppm	39	38	37	36	35	35	34	34	34	34	34	35	33	34
	10000ppm	32	31	31	27	24	27	28	28	28	26	25	26	26	25

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 40

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
RED URINE	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	1	1	0	0	0	1
BROWN URINE	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0
	2500ppm	2	3	2	0	1	0
	5000ppm	0	0	1	1	1	0
	10000ppm	2	1	0	0	0	0
OLIGO-STOOL	Control	1	1	0	0	0	0
	2500ppm	1	2	3	0	0	0
	5000ppm	0	0	1	0	1	1
	10000ppm	3	2	0	0	0	0
NON REMARKABLE	Control	23	23	23	22	22	22
	2500ppm	32	32	31	30	29	28
	5000ppm	34	34	33	32	32	32
	10000ppm	24	23	24	25	23	23

APPENDIX B 2

CLINICAL OBSERVATION : FEMALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	1	0	0	0	0	0	2	2	5	3	3	3	3

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7											
DEATH	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	2	2	7	7	7	7	8	8	8	8	8
	5000ppm	0	2	5	3	1	5	5	7	6	6	6	6	15	15
	10000ppm	3	4	4	5	5	11	11	14	14	14	14	15	19	19

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	8	8	8	10	10	10	13	10	10	11	11	11	11	13
	5000ppm	16	16	16	15	15	17	19	20	20	24	24	24	25	26
	10000ppm	19	28	31	29	29	24	31	29	30	31	32	32	32	31

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7											
DEATH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	3	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	2	2
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	13	13	13	13	13	13	14	14	14	14	14	14	16	16
	5000ppm	25	25	25	24	21	20	23	20	21	21	21	21	24	25
	10000ppm	31	31	31	33	32	32	34	33	32	31	33	33	34	34

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7											
DEATH	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	3
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	5000ppm	2	2	2	2	1	0	0	0	0	0	0	0	0	0
	10000ppm	3	3	3	3	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	2500ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	1	2	1
	2500ppm	16	16	15	15	15	13	13	11	11	11	10	10	10	10
	5000ppm	25	27	25	23	24	23	23	22	22	22	22	21	21	21
	10000ppm	34	36	36	35	35	36	36	37	37	37	36	36	36	36

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	4	4	4	4	4	4	5	5	5	5	5	5	5	5
	2500ppm	0	0	0	0	0	1	2	2	2	2	2	2	2	2
	5000ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	8	8	7	7	8	7	5	5	4	3	5	5	3	3
	5000ppm	22	22	20	20	19	19	20	20	21	18	20	18	17	18
	10000ppm	36	36	38	38	37	37	34	34	36	33	32	31	28	28

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
DEATH	Control	5	5	5	5	6	6	7	7	7	8	8	8	8	8
	2500ppm	2	2	2	2	2	2	2	3	3	4	4	5	5	5
	5000ppm	1	2	2	2	2	2	2	2	3	3	3	3	3	4
	10000ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	1	1	0	0	0	0	0	0	1	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	5000ppm	0	0	0	0	0	0	1	1	0	0	1	0	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	2	2	2	2	2	2	2	3	2	1	1	1	1	1
	5000ppm	15	14	10	7	6	6	7	7	7	7	3	3	3	3
	10000ppm	24	24	25	24	24	24	23	23	19	19	15	16	15	15

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	9	10	10	10	11	11
	2500ppm	5	6	6	7	7	8
	5000ppm	6	7	7	7	8	8
	10000ppm	2	3	4	4	5	6
MORIBUND SACRIFICE	Control	0	0	0	0	0	0
	2500ppm	0	1	1	1	1	2
	5000ppm	2	2	3	3	4	4
	10000ppm	0	1	1	2	2	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	2500ppm	0	1	1	0	0	0
	5000ppm	1	0	0	0	0	0
	10000ppm	0	1	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	1	1	1	0
WASTING	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	1	1	1	0
SOILED	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	1
	2500ppm	1	1	1	0	0	1
	5000ppm	1	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	2500ppm	1	1	1	1	2	2
	5000ppm	3	3	4	4	2	2
	10000ppm	17	15	15	15	12	12

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	1	1	1	0	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	10000ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	2500ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	1	1	1	1	1	1	1	1	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	1	1	1	1	1	1	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7											
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	4
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	2	2	2	2	2	2	2	2	2	2	2	2	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	3	2	2	2	3	3	2	2	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	0	0	0	1	1	2	1	1
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
M. PERI-MOUTH	Control	1	0	0	0	1	1	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7											
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	4	4	4	4	4	4	5	5	5	5	5	5	5	5
	10000ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	2	2	2	3	3	3	3	3	3	4	4	4	4	4
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2500ppm	0	1	1	1	1	1	1	1	1	2	2	2	2	2
	5000ppm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	10000ppm	2	2	2	3	3	3	3	3	3	3	3	3	3	3
CORNEAL OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2500ppm	0	1	1	1	1	1	0	1	1	1	1	1	1	1
	5000ppm	2	2	2	2	2	2	3	4	3	3	3	4	4	4
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	2500ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5000ppm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	10000ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
CORNEAL OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	4	4	4	5	4	5	4	4	4	4	4	4	4	5
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	4	4	4	4	5	7	7	8	7	7	7	8	8	8
	10000ppm	1	1	1	1	0	0	0	0	1	2	2	2	2	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	1	0	0	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	5000ppm	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	1	1	1	1	0	0	0	0	1	1	1	1	1	2

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
EXOPHTHALMOS	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
LACRIMATION	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
CATARACT	Control	3	3	3	3	3	3
	2500ppm	2	2	2	2	2	2
	5000ppm	5	5	5	5	4	4
	10000ppm	3	4	3	3	3	2
CORNEAL OPACITY	Control	1	1	1	1	1	1
	2500ppm	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	5	6	6	6	6	6
	2500ppm	1	3	3	3	3	4
	5000ppm	7	7	7	8	8	9
	10000ppm	3	2	2	2	1	1
INTERNAL MASS	Control	0	0	0	0	0	0
	2500ppm	1	0	0	0	1	2
	5000ppm	0	0	0	0	0	0
	10000ppm	1	1	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	1	1	1	1	1
	2500ppm	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	1
	10000ppm	2	2	2	2	1	1

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7											
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HTNDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERT EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ITNDLTMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	0	0	0	0	0	1	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	1	1	1	1	1	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	10000ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
M. ABDOMEN	Control	1	1	1	1	0	0	0	0	0	0	0	0	0	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	1	1	2	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	1	2	2	3	2	2	2	3	3	3
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. ORAL CAVITY	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	1	1	2	2	2	2
	10000ppm	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1
	2500ppm	0	1	1	1	1	1
	5000ppm	2	2	2	3	3	4
	10000ppm	1	0	0	0	0	0
M. ABDOMEN	Control	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	1
	5000ppm	1	1	1	1	1	1
	10000ppm	0	0	0	0	0	0
M. HINDLIMB	Control	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	1
	2500ppm	0	1	1	1	1	1
	5000ppm	2	2	2	2	2	2
	10000ppm	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7											
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 69

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	1	0	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	2500ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE : 70

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
ANEMIA	Control	0	0	0	0	0	0	0	1	0	0	0	0	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	1	1	1	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	1	2	1	1	1	1
	10000ppm	0	0	0	0	0	0	0	0	1	1	1	0	0	0

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 71

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
ANEMIA	Control	1	1	1	2	2	2	2	1	2	1	1	1	1	1
	2500ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	1
	5000ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2500ppm	0	0	0	1	1	2	2	2	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	1	1	1	1	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	1	1	0	1	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	2
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
YELLOW URINE	Control	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	1	1	1	1	2	1	1	1	0	0	1	1	1
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	1	0	0	0	0	1	0	1	0	0	0	0	1	2
	10000ppm	0	1	1	2	1	0	0	0	0	0	0	1	2	2

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
ANEMIA	Control	2	2	2	2	3	3
	2500ppm	1	0	2	3	3	1
	5000ppm	1	0	0	0	0	1
	10000ppm	0	0	2	2	2	1
JAUNDICE	Control	0	0	0	0	0	0
	2500ppm	1	0	0	0	1	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
CRUSTA	Control	1	1	1	1	1	1
	2500ppm	1	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
HEMORRIAGE	Control	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	1
	2500ppm	1	1	1	0	1	0
	5000ppm	1	0	0	0	0	0
	10000ppm	2	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0
	2500ppm	1	1	2	2	2	1
	5000ppm	0	0	1	1	0	0
	10000ppm	1	0	1	1	0	0
YELLOW URINE	Control	0	0	0	0	0	0
	2500ppm	1	0	1	1	1	0
	5000ppm	1	0	0	0	0	1
	10000ppm	0	0	1	1	1	1
SMALL STOOL	Control	0	0	0	0	0	1
	2500ppm	2	1	0	3	4	2
	5000ppm	1	0	0	0	0	0
	10000ppm	3	2	1	1	1	1

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	49	49	49	49	49	49
	2500ppm	50	49	50	50	49	49	50	50	50	50	50	50	49	50
	5000ppm	50	50	50	50	50	50	50	50	50	50	49	49	49	49
	10000ppm	50	49	50	50	50	50	50	48	47	44	46	47	46	46

(HAN190)

BATS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 74

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	48	48	48	47	47	47	47	47	46	46
	2500ppm	50	50	50	48	48	43	42	42	42	41	41	41	41	41
	5000ppm	49	47	44	46	48	44	44	42	43	43	42	42	34	33
	10000ppm	46	46	46	45	45	39	39	36	35	35	35	34	30	30

(HAN190)

BATS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7											
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	46	47	47	47	46	46	45	46	46	46	46	46	46	46
	2500ppm	41	41	41	39	39	39	36	39	39	38	38	38	37	36
	5000ppm	32	31	32	33	33	30	29	28	28	24	24	24	22	21
	10000ppm	30	21	18	20	20	25	18	20	19	18	17	17	17	18

(HAN190)

BATS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	44	45	45	45	44	44	45	45	45	45	45	45	45	45
	2500ppm	36	36	36	36	35	35	34	34	34	34	33	33	32	32
	5000ppm	22	22	22	24	27	27	25	28	27	26	24	24	20	19
	10000ppm	18	18	18	16	17	17	15	16	17	18	16	16	14	14

(HAN190)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 77

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	45	45	45	44	44	44	44	44	44	43	40	40	40	40
	2500ppm	32	32	33	33	34	35	35	38	38	38	39	38	39	39
	5000ppm	20	18	20	22	23	23	23	24	24	24	24	25	25	25
	10000ppm	14	12	12	13	13	12	12	11	11	11	13	13	13	13

(HAN190)

BATS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 78

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	1
	10000ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
NON REMARKABLE	Control	39	39	39	39	39	39	38	38	38	38	38	38	38	38
	2500ppm	41	39	40	39	38	39	41	40	42	41	39	39	41	41
	5000ppm	24	24	26	26	26	26	24	24	24	26	25	24	25	25
	10000ppm	13	13	11	11	12	12	15	15	13	16	17	17	20	20

(HAN190)

BATS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 79

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
OLIGO-STOOL	Control	0	1	1	2	1	2	1	1	1	0	0	1	1	1
	2500ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	5000ppm	1	0	0	0	0	1	1	1	0	0	0	0	0	3
	10000ppm	0	0	0	1	0	0	0	0	0	0	0	1	1	1
NON REMARKABLE	Control	38	37	37	37	36	35	35	35	35	35	35	33	32	32
	2500ppm	42	41	41	40	40	39	38	37	39	39	38	37	35	35
	5000ppm	28	28	30	32	32	31	29	28	28	28	31	30	28	27
	10000ppm	24	24	23	24	23	23	24	24	28	27	31	30	31	30

(HAN190)

BATS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 80

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
OLIGO-STOOL	Control	0	0	0	0	0	1
	2500ppm	2	1	0	2	2	1
	5000ppm	1	0	0	0	0	1
	10000ppm	1	1	2	2	1	1
NON REMARKABLE	Control	32	30	30	30	28	27
	2500ppm	35	33	31	29	29	29
	5000ppm	27	27	25	24	25	23
	10000ppm	29	28	24	24	26	26

(HAN190)

BATS 4

APPENDIX C 1

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week		1		2		3		4		5		6	
	0													
Control	126 ±	5	157 ±	8	187 ±	10	214 ±	10	235 ±	11	249 ±	12	261 ±	13
2500ppm	126 ±	5	156 ±	7	185 ±	10	209 ±	11	228 ±	12**	243 ±	13*	254 ±	13*
5000ppm	126 ±	5	155 ±	7	184 ±	9	209 ±	10*	228 ±	11**	243 ±	12*	256 ±	14
10000ppm	126 ±	5	150 ±	7**	176 ±	9**	200 ±	10**	218 ±	10**	233 ±	10**	246 ±	11**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAYS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week											
	7		8		9		10		11		12	
Control	274±	14	283±	14	292±	14	299±	14	305±	15	313±	16
2500ppm	267±	14*	275±	15*	286±	16	293±	15	300±	16	307±	15
5000ppm	269±	14	279±	16	289±	17	296±	17	303±	18	309±	18
10000ppm	257±	13**	265±	13**	274±	13**	279±	13**	288±	13**	293±	14**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week									
	17		21		25		29		33	
Control	334± 17		350± 16		357± 18		367± 17		374± 18	
2500ppm	328± 16		345± 18		354± 19		365± 19		373± 22	
5000ppm	332± 20		349± 22		356± 23		368± 23		376± 24	
10000ppm	314± 15**		328± 17**		336± 20**		348± 19**		353± 22**	

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 4

Group Name	Administration week											
	45		49		53		57		61		65	
Control	396±	20	398±	20	406±	22	411±	22	416±	23	423±	23
2500ppm	392±	26	396±	28	402±	29	409±	29	417±	27	423±	27
5000ppm	396±	26	401±	26	408±	26	413±	26	420±	27	424±	29
10000ppm	374±	24**	378±	26**	384±	26**	390±	27**	397±	25**	403±	27**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week											
	73		77		78		82		86		90	
Control	426 ± 25		429 ± 27		429 ± 29		429 ± 42		419 ± 41		420 ± 29	
2500ppm	427 ± 27		432 ± 27		431 ± 27		431 ± 25		431 ± 26		428 ± 26	
5000ppm	428 ± 27		429 ± 27		429 ± 28		428 ± 27		425 ± 37		426 ± 28	
10000ppm	406 ± 25**		410 ± 26**		409 ± 26**		409 ± 28*		411 ± 26		407 ± 30	

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week					
	98		102		104	
Control	423 ± 25		419 ± 31		415 ± 34	
2500ppm	418 ± 29		412 ± 29		408 ± 28	
5000ppm	420 ± 26		411 ± 27		405 ± 26	
10000ppm	398 ± 30**		397 ± 25**		389 ± 30**	

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX C 2

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week													
	0		1		2		3		4		5		6	
Control	99±	3	115±	4	129±	4	137±	5	144±	5	151±	6	155±	7
2500ppm	99±	3	114±	3	126±	5**	133±	5**	140±	6**	145±	6**	149±	7**
5000ppm	99±	3	114±	4	124±	4**	132±	5**	138±	6**	143±	7**	147±	8**
10000ppm	99±	3	111±	4**	122±	5**	129±	5**	135±	6**	140±	7**	144±	8**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week		7		8		9		10		11		12		13	
Control	158±	8	162±	8	166±	9	168±	9	171±	9	174±	9	177±	9		
2500ppm	152±	8**	154±	9**	159±	9**	161±	9**	164±	9**	168±	10**	170±	10**		
5000ppm	151±	9**	154±	9**	158±	10**	161±	10**	164±	10**	168±	11**	169±	11**		
10000ppm	147±	8**	148±	8**	152±	9**	154±	10**	157±	10**	160±	11**	162±	11**		

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration week											
	17		21		25		29		33		37	
Control	183± 10		188± 11		193± 10		199± 11		203± 11		206± 11	
2500ppm	175± 11**		180± 11**		183± 11**		190± 12**		194± 12**		196± 13**	
5000ppm	174± 12**		180± 13**		184± 13**		190± 14**		194± 15**		196± 15**	
10000ppm	166± 11**		170± 11**		174± 12**		180± 13**		183± 14**		185± 14**	

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week											
	45		49		53		57		61		65	
Control	216±	13	219±	14	224±	15	229±	16	233±	17	241±	19
2500ppm	205±	15**	208±	16**	213±	16**	217±	16**	221±	17**	228±	19*
5000ppm	204±	17**	208±	18**	213±	20**	219±	21*	223±	22*	230±	24*
10000ppm	193±	16**	196±	17**	200±	17**	205±	18**	209±	19**	214±	20**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration week											
	73		77		78		82		86		90	
Control	252 ± 25		257 ± 26		258 ± 26		265 ± 29		271 ± 33		270 ± 36	
2500ppm	237 ± 21**		241 ± 20**		243 ± 21*		249 ± 20*		255 ± 21**		257 ± 23	
5000ppm	239 ± 26*		244 ± 26*		245 ± 26*		250 ± 28*		256 ± 29		256 ± 29	
10000ppm	220 ± 23**		224 ± 24**		225 ± 25**		231 ± 24**		236 ± 26**		238 ± 24**	

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week					
	98		102		104	
Control	277 ± 35		276 ± 38		273 ± 40	
2500ppm	261 ± 24*		260 ± 28		260 ± 27	
5000ppm	262 ± 31		263 ± 30		261 ± 30	
10000ppm	239 ± 27**		240 ± 30**		243 ± 21**	

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX D 1

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	1	2	3	4	5	6	7
Control	13.8± 0.8	15.2± 1.0	-	16.2± 0.8	15.8± 0.9	15.4± 0.9	15.4± 0.9
2500ppm	13.9± 0.8	15.3± 1.1	15.8± 0.9	15.7± 0.9*	15.6± 0.9	15.2± 1.1	15.1± 0.9
5000ppm	13.6± 1.0	14.9± 0.9	15.2± 0.9	15.6± 0.7**	15.5± 0.8	15.4± 0.9	15.4± 0.9
10000ppm	12.6± 0.8**	13.9± 1.0**	14.6± 0.9	15.0± 1.0**	14.8± 0.8**	14.6± 0.9**	14.6± 1.0**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week						
	8	9	10	11	12	13	17
Control	15.4± 0.8	15.4± 0.7	15.1± 0.7	14.9± 0.8	14.8± 0.9	14.7± 1.0	14.6± 0.9
2500ppm	15.1± 0.9	15.4± 1.2	14.9± 0.8	15.0± 0.9	14.8± 0.8	14.7± 0.8	14.6± 0.8
5000ppm	15.3± 1.0	15.4± 1.2	15.1± 0.9	15.2± 1.0	14.8± 0.9	14.8± 0.9	14.7± 1.0
10000ppm	14.5± 0.9**	14.3± 0.9**	14.3± 0.9**	14.5± 0.9	14.3± 1.0*	14.3± 0.9*	14.0± 0.9**

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week						
	21	25	29	33	37	41	45
Control	15.1± 0.9	15.9± 0.8	15.2± 0.8	15.4± 0.7	14.9± 0.8	14.8± 0.9	15.3± 0.9
2500ppm	14.9± 0.9	15.7± 1.0	15.3± 0.8	15.4± 1.0	15.0± 1.1	14.9± 1.1	15.2± 1.1
5000ppm	15.1± 1.0	15.9± 1.3	15.5± 1.0	15.6± 1.0	15.3± 0.9	15.1± 1.0	15.2± 0.8
10000ppm	14.4± 1.0**	15.3± 0.9**	14.8± 0.9	14.7± 1.0**	14.5± 0.9	14.4± 1.0	14.8± 1.0

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week						
	49	53	57	61	65	69	73
Control	15.5± 1.0	15.7± 1.0	16.1± 1.0	15.9± 1.0	16.1± 1.1	15.9± 1.1	15.9± 0.9
2500ppm	15.6± 1.1	15.7± 1.1	16.3± 1.2	16.3± 0.9	16.4± 1.1	16.5± 1.0*	16.2± 1.3
5000ppm	15.9± 1.0	15.9± 1.1	16.4± 1.1	16.1± 1.0	16.2± 1.0	16.3± 1.0	16.1± 1.1
10000ppm	15.4± 1.1	15.4± 1.0	16.1± 1.0	15.9± 1.0	16.1± 1.1	16.0± 0.9	15.8± 0.9

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	77	78	82	86	90	94	98
Control	16.1± 0.9	16.1± 1.0	15.4± 1.4	15.5± 2.8	15.8± 1.0	16.1± 1.2	16.1± 1.4
2500ppm	16.6± 1.0	16.4± 1.0	15.8± 1.6	16.4± 0.9*	16.3± 1.2	16.3± 1.5	16.1± 1.5
5000ppm	16.2± 1.2	16.1± 1.1	16.0± 1.5	16.2± 1.4	16.1± 1.3	16.0± 2.3	16.0± 1.7
10000ppm	16.0± 0.9	15.7± 0.9	15.2± 1.4	16.0± 1.1	15.4± 1.4	15.4± 2.3	15.2± 2.1*

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week	
	102	104
Control	16.2± 1.4	16.2± 1.6
2500ppm	16.2± 1.9	16.2± 1.5
5000ppm	15.7± 1.9	15.7± 1.5
10000ppm	15.4± 1.2	15.3± 1.5*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett

(HAN260)

BAIS 4

APPENDIX D 2

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week						
	1	2	3	4	5	6	7
Control	10.4± 0.6	10.9± 0.5	11.1± 0.6	10.8± 0.6	10.7± 0.6	10.4± 0.6	10.2± 0.9
2500ppm	10.5± 0.5	10.6± 0.9	10.5± 0.6**	10.5± 0.6*	10.2± 0.6**	10.0± 0.6**	9.7± 0.7**
5000ppm	10.3± 0.6	10.2± 0.7**	10.2± 0.6**	10.2± 0.7**	10.2± 0.8**	9.9± 0.8**	9.8± 0.8*
10000ppm	9.6± 0.6**	10.0± 0.6**	9.8± 0.7**	9.8± 0.6**	9.8± 0.6**	9.5± 0.7**	9.4± 0.7**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	8	9	10	11	12	13	17
Control	10.1± 0.6	10.2± 0.7	9.9± 0.6	10.1± 0.6	10.2± 0.6	10.1± 0.6	10.4± 0.6
2500ppm	9.5± 0.7**	9.7± 0.6**	9.6± 0.6	9.9± 0.6	9.7± 0.6**	9.7± 0.7*	10.0± 0.7**
5000ppm	9.5± 0.8**	9.7± 0.7**	9.6± 0.8	9.9± 0.7	9.9± 0.8*	9.8± 0.7*	10.0± 0.7**
10000ppm	9.1± 0.7**	9.1± 0.7**	9.0± 0.7**	9.3± 0.7**	9.2± 0.7**	9.4± 0.7**	9.4± 0.6**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration week						
	21	25	29	33	37	41	45
Control	10.2± 0.7	10.5± 0.7	10.7± 0.8	10.5± 0.5	10.3± 0.6	10.6± 0.7	11.1± 0.9
2500ppm	9.9± 0.6	10.2± 0.6*	10.1± 0.7**	10.4± 0.7	9.8± 0.7**	10.2± 0.7*	10.8± 0.7
5000ppm	9.8± 0.7*	10.2± 0.7*	10.1± 0.9**	10.2± 0.8*	9.8± 0.7**	10.3± 0.8*	10.6± 0.9*
10000ppm	9.3± 0.7**	9.6± 0.7**	9.6± 0.7**	9.7± 0.7**	9.3± 0.7**	9.8± 0.7**	10.1± 0.9**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week						
	49	53	57	61	65	69	73
Control	10.9± 0.7	11.1± 0.8	11.7± 0.9	11.7± 0.8	11.7± 1.0	11.7± 0.9	12.0± 1.0
2500ppm	10.5± 0.8*	11.0± 0.8	11.0± 0.8**	11.4± 0.9	11.6± 0.9	11.2± 0.9*	11.6± 1.0
5000ppm	10.6± 0.8	10.8± 0.8	11.4± 0.9	11.3± 0.9*	11.4± 1.0	11.5± 1.1	11.6± 1.0
10000ppm	10.1± 0.8**	10.3± 0.8**	10.8± 0.9**	10.9± 0.8**	11.1± 1.0**	10.9± 0.8**	11.2± 1.0**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration week						
	77	78	82	86	90	94	98
Control	12.2± 1.0	12.0± 1.0	12.2± 1.1	12.7± 1.6	12.3± 1.8	12.8± 1.6	12.7± 2.0
2500ppm	11.8± 0.9	11.7± 0.8	11.9± 0.9	12.2± 0.9	12.0± 1.1	12.1± 1.0**	12.4± 1.1
5000ppm	11.8± 0.9	11.5± 0.9*	11.5± 1.1**	12.2± 1.0	11.6± 1.7*	12.2± 1.0	11.7± 2.5*
10000ppm	11.3± 0.9**	11.1± 0.8**	11.3± 0.9**	11.6± 1.1**	11.6± 0.9**	11.8± 1.0**	11.5± 1.8**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week	
	102	104
Control	12.6± 1.5	12.5± 2.2
2500ppm	11.9± 2.5	12.2± 2.0
5000ppm	12.0± 1.6	12.1± 1.9
10000ppm	11.4± 2.0**	11.7± 2.0

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX E 1

WATER CONSUMPTION CHANGES : MALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	1	2	3	4	5	6	7
Control	18.8± 5.2	19.3± 2.6	20.1± 1.9	20.5± 2.1	19.7± 2.1	19.5± 2.0	19.1± 2.3
2500ppm	17.2± 1.6	18.7± 2.2	19.6± 2.1	19.8± 2.5*	19.4± 4.1*	18.8± 2.5	18.8± 3.5
5000ppm	16.3± 2.0**	17.1± 2.1**	17.8± 1.5**	18.1± 1.3**	17.6± 1.5**	18.1± 1.5**	17.8± 2.2**
10000ppm	14.7± 1.8**	15.4± 3.1**	17.3± 5.5**	16.5± 4.2**	15.2± 1.5**	15.6± 2.2**	14.9± 1.8**

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week						
	8	9	10	11	12	13	17
Control	19.0± 2.1	18.9± 2.1	18.8± 3.1	18.4± 2.6	18.3± 2.2	18.1± 2.2	17.2± 2.8
2500ppm	19.0± 3.6	18.3± 2.3	18.2± 3.6	17.2± 2.1*	17.3± 1.9*	17.8± 3.7	16.6± 2.0
5000ppm	17.7± 1.8**	18.4± 3.8*	17.6± 2.5	16.9± 2.2**	16.8± 1.7**	16.8± 1.5**	16.4± 1.3
10000ppm	15.1± 1.7**	15.2± 2.0**	15.7± 3.1**	16.3± 3.5**	16.4± 6.5**	15.1± 1.7**	15.0± 2.2**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week						
	21	25	29	33	37	41	45
Control	18.0± 2.7	17.7± 2.9	17.7± 2.6	17.5± 1.8	17.3± 2.1	16.0± 2.0	17.8± 2.1
2500ppm	17.1± 2.0	17.4± 1.7	17.0± 1.8	17.2± 1.8	17.3± 1.9	16.1± 1.9	17.5± 2.1
5000ppm	16.8± 1.6*	18.7± 6.0	16.9± 1.4	17.2± 1.4	17.3± 1.4	16.8± 1.8**	17.8± 1.6
10000ppm	15.6± 2.7**	16.8± 2.8**	15.9± 3.7**	16.2± 2.0**	17.7± 3.4	16.8± 3.6	17.8± 5.5*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week						
	49	53	57	61	65	69	73
Control	17.6± 2.2	18.2± 2.5	17.8± 2.1	17.7± 2.4	18.1± 2.4	18.1± 2.6	18.4± 3.0
2500ppm	17.4± 2.1	17.6± 2.1	17.7± 2.0	17.7± 2.0	18.1± 2.5	18.2± 2.2	18.1± 2.1
5000ppm	18.1± 1.7	18.7± 4.6	18.8± 3.7	19.5± 5.2**	18.8± 3.5	18.9± 3.1	19.1± 2.3*
10000ppm	18.3± 4.6	17.9± 5.1**	18.7± 5.0	19.2± 6.7	18.3± 4.7	19.7± 5.6	20.2± 5.3*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	77	78	82	86	90	94	98
Control	18.3± 3.0	18.8± 3.1	18.9± 4.7	17.8± 3.8	18.9± 3.2	19.4± 3.8	19.5± 3.8
2500ppm	18.8± 2.3	18.8± 2.8	18.7± 2.9	19.0± 3.2	20.0± 3.7	21.1± 4.5	20.9± 5.4
5000ppm	18.9± 3.0	19.5± 3.2	20.0± 4.2	19.4± 4.8	21.0± 4.8*	20.4± 5.4	20.1± 4.9
10000ppm	20.4± 5.6*	20.4± 5.2	19.5± 4.7	20.5± 5.5	21.2± 5.8	21.0± 6.5	19.9± 6.7

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week	
	102	104
Control	20.9± 4.7	21.4± 5.1
2500ppm	20.7± 4.9	22.3± 7.1
5000ppm	20.8± 3.8	22.2± 6.4
10000ppm	20.2± 5.3	20.1± 4.8

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett

(HAN260)

BAIS 4

APPENDIX E 2

WATER CONSUMPTION CHANGES : FEMALE

APPENDIX E 2

WATER CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week						
	1	2	3	4	5	6	7
Control	15.0± 1.1	16.4± 1.0	16.3± 1.2	17.4± 4.8	17.2± 6.7	18.4± 7.9	17.1± 6.0
2500ppm	14.5± 1.1*	15.4± 1.5**	15.6± 3.0**	15.2± 2.9**	14.3± 2.7**	14.5± 6.1**	13.3± 1.7**
5000ppm	13.5± 0.9**	14.3± 2.8**	14.4± 1.9**	14.5± 2.4**	14.3± 3.8**	13.9± 3.1**	13.9± 4.7**
10000ppm	11.7± 0.9**	12.4± 1.4**	12.3± 2.1**	12.4± 1.9**	12.1± 2.8**	12.0± 2.6**	11.9± 3.5**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	8	9	10	11	12	13	17
Control	17.7± 6.9	17.6± 5.8	18.4± 7.7	19.1± 8.5	18.1± 6.8	20.4± 10.2	19.5± 7.5
2500ppm	13.7± 2.1**	14.3± 4.2**	14.4± 6.9**	15.0± 5.6**	14.4± 4.4**	15.6± 7.8**	15.7± 6.9**
5000ppm	14.5± 6.7**	14.9± 5.9**	14.2± 4.9**	14.8± 6.6**	15.7± 8.8**	14.7± 5.1**	15.1± 4.8**
10000ppm	11.4± 1.7**	12.1± 6.4**	12.1± 6.9**	12.1± 5.9**	12.7± 6.5**	12.8± 5.3**	12.3± 3.4**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 9

Group Name	Administration week 21	25	29	33	37	41	45
Control	20.2± 8.6	18.7± 7.5	17.6± 5.2	18.2± 7.3	17.2± 5.1	17.7± 5.4	16.9± 4.8
2500ppm	15.2± 4.9**	14.8± 4.6**	15.9± 7.8**	15.9± 6.3*	15.9± 6.0	16.8± 8.5**	15.8± 4.7
5000ppm	17.8± 9.6**	15.9± 4.7**	15.4± 5.2**	15.7± 5.8*	15.6± 5.6	16.3± 5.1	16.0± 5.1
10000ppm	13.6± 6.7**	14.6± 6.3**	14.7± 5.8**	13.8± 3.4**	15.0± 6.1	16.2± 6.4**	15.3± 5.3

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week						
	49	53	57	61	65	69	73
Control	17.3± 6.4	16.9± 4.7	15.2± 2.5	16.4± 4.4	15.1± 2.9	15.2± 2.5	15.5± 3.1
2500ppm	15.9± 7.4*	15.7± 6.4	17.0± 8.0	16.4± 7.0	14.8± 2.9	14.4± 2.2	15.8± 3.9
5000ppm	16.8± 9.6	16.4± 5.3	15.5± 4.9	15.4± 4.2	14.9± 3.2	15.5± 4.8	15.6± 3.0
10000ppm	15.1± 6.0**	15.1± 5.4	16.3± 5.9	16.2± 5.2	16.2± 4.4	17.6± 6.7	17.7± 5.4

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration week									
	77	78	82	86	90	94	98			
Control	15.0± 2.6	15.5± 3.0	15.5± 2.2	16.2± 3.2	17.4± 6.2	17.1± 4.2	19.0± 7.7			
2500ppm	15.7± 4.5	16.2± 4.4	15.2± 2.3	16.0± 2.4	15.5± 2.7	16.4± 3.0	16.8± 3.1			
5000ppm	14.6± 2.0	15.3± 3.7	14.5± 2.4	14.9± 2.4	15.5± 4.2	16.4± 4.1	16.5± 5.3			
10000ppm	17.2± 5.2	18.0± 5.5*	17.6± 5.9	17.6± 5.8	18.5± 6.9	18.9± 5.3	18.9± 5.9			

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week	
	102	104
Control	18.9± 6.5	18.8± 8.0
2500ppm	17.5± 4.2	18.1± 4.4
5000ppm	17.2± 5.3	17.3± 5.4
10000ppm	19.1± 6.9	19.3± 6.2

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX F 1

CHEMICAL INTAKE CHANGES : MALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 1

Group Name	Administration (weeks)									
	1	2	3	4	5	6	7			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
2500ppm	0.275± 0.022	0.253± 0.026	0.234± 0.023	0.217± 0.025	0.200± 0.046	0.185± 0.024	0.176± 0.030			
5000ppm	0.527± 0.055	0.465± 0.048	0.428± 0.038	0.397± 0.024	0.361± 0.023	0.353± 0.023	0.332± 0.039			
10000ppm	0.982± 0.105	0.874± 0.178	0.861± 0.256	0.756± 0.192	0.652± 0.064	0.635± 0.077	0.577± 0.064			

(HAN300)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 2

Group Name	Administration (weeks)									
	8	9	10	11	12	13	17			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
2500ppm	0.172± 0.030	0.161± 0.019	0.155± 0.029	0.144± 0.016	0.141± 0.014	0.142± 0.030	0.127± 0.013			
5000ppm	0.317± 0.027	0.320± 0.072	0.298± 0.049	0.279± 0.028	0.272± 0.022	0.266± 0.015	0.247± 0.014			
10000ppm	0.570± 0.061	0.553± 0.073	0.562± 0.106	0.567± 0.110	0.557± 0.215	0.505± 0.052	0.478± 0.067			

(HAN300)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
UNIT : g/kg/d a y
REPORT TYPE : AI 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 3

Group Name	Administration (weeks)									
	21	25	29	33	37	41	45			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
2500ppm	0.124± 0.013	0.123± 0.011	0.117± 0.012	0.116± 0.012	0.114± 0.012	0.105± 0.011	0.111± 0.013			
5000ppm	0.242± 0.022	0.263± 0.080	0.229± 0.016	0.229± 0.016	0.225± 0.015	0.216± 0.021	0.225± 0.019			
10000ppm	0.476± 0.092	0.502± 0.097	0.460± 0.117	0.460± 0.062	0.490± 0.102	0.460± 0.104	0.477± 0.140			

(HAN300)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 4

Group Name	Administration (weeks)									
	49	53	57	61	65	69	73			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
2500ppm	0.110± 0.013	0.110± 0.013	0.108± 0.014	0.106± 0.014	0.107± 0.017	0.108± 0.016	0.106± 0.014			
5000ppm	0.225± 0.019	0.229± 0.053	0.227± 0.040	0.231± 0.055	0.223± 0.046	0.225± 0.050	0.224± 0.026			
10000ppm	0.486± 0.128	0.469± 0.134	0.481± 0.133	0.485± 0.169	0.455± 0.115	0.489± 0.144	0.500± 0.143			

(HAN300)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration (weeks)									
	77	78	82	86	90	94	98			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
2500ppm	0.109± 0.016	0.109± 0.019	0.109± 0.019	0.111± 0.021	0.117± 0.023	0.125± 0.029	0.126± 0.035			
5000ppm	0.221± 0.033	0.227± 0.037	0.234± 0.047	0.226± 0.055	0.247± 0.057	0.241± 0.062	0.240± 0.058			
10000ppm	0.500± 0.149	0.501± 0.147	0.481± 0.140	0.503± 0.152	0.525± 0.161	0.536± 0.200	0.507± 0.205			

(HAN300)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration (weeks)	
	102	104
Control	0.000 ± 0.000	0.000 ± 0.000
2500ppm	0.126 ± 0.035	0.138 ± 0.053
5000ppm	0.255 ± 0.049	0.276 ± 0.086
10000ppm	0.509 ± 0.137	0.517 ± 0.130

(HAN300)

BAIS 4

APPENDIX F 2

CHEMICAL INTAKE CHANGES : FEMALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration (weeks)											
	1		2		3		4		5		6	
Control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
2500ppm	0.317±	0.020	0.306±	0.031	0.291±	0.052	0.271±	0.055	0.248±	0.048	0.245±	0.110
5000ppm	0.595±	0.031	0.576±	0.105	0.544±	0.067	0.525±	0.078	0.498±	0.128	0.473±	0.101
10000ppm	1.054±	0.076	1.019±	0.101	0.951±	0.153	0.915±	0.131	0.862±	0.186	0.833±	0.172

(HAN300)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 8

Group Name	Administration (weeks)									
	8	9	10	11	12	13	17			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
2500ppm	0.220± 0.032	0.224± 0.066	0.223± 0.103	0.229± 0.085	0.215± 0.070	0.228± 0.108	0.225± 0.100			
5000ppm	0.470± 0.213	0.473± 0.185	0.441± 0.153	0.449± 0.198	0.468± 0.263	0.435± 0.146	0.432± 0.133			
10000ppm	0.769± 0.099	0.793± 0.392	0.781± 0.416	0.767± 0.345	0.786± 0.378	0.785± 0.297	0.738± 0.180			

(HAN300)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration (weeks)									
	21	25	29	33	37	41	45			
Control	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	
2500ppm	0.210 ± 0.064	0.202 ± 0.062	0.209 ± 0.102	0.204 ± 0.075	0.203 ± 0.074	0.209 ± 0.102	0.193 ± 0.058			
5000ppm	0.496 ± 0.269	0.433 ± 0.126	0.405 ± 0.130	0.403 ± 0.147	0.399 ± 0.135	0.407 ± 0.118	0.391 ± 0.120			
10000ppm	0.792 ± 0.368	0.837 ± 0.344	0.818 ± 0.307	0.754 ± 0.167	0.806 ± 0.294	0.851 ± 0.328	0.794 ± 0.266			

(HAN300)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration (weeks)									
	49	53	57	61	65	69	73			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	
2500ppm	0.192± 0.095	0.184± 0.072	0.195± 0.090	0.186± 0.080	0.162± 0.031	0.156± 0.025	0.167± 0.044			
5000ppm	0.401± 0.221	0.385± 0.118	0.354± 0.101	0.346± 0.099	0.325± 0.061	0.332± 0.096	0.328± 0.060			
10000ppm	0.766± 0.287	0.751± 0.241	0.796± 0.279	0.772± 0.222	0.756± 0.188	0.814± 0.288	0.806± 0.232			

(HAN300)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration (weeks)		78	82	86	90	94	98
	77							
Control	0.000± 0.000		0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
2500ppm	0.165± 0.057		0.168± 0.048	0.154± 0.024	0.157± 0.024	0.152± 0.028	0.160± 0.031	0.162± 0.033
5000ppm	0.299± 0.033		0.314± 0.075	0.292± 0.040	0.292± 0.037	0.304± 0.081	0.317± 0.070	0.316± 0.095
10000ppm	0.771± 0.215		0.798± 0.228	0.759± 0.226	0.745± 0.221	0.772± 0.255	0.782± 0.198	0.800± 0.276

(HAN300)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g/kg/day
REPORT TYPE : AI 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration (weeks)			
	102		104	
Control	0.000±	0.000	0.000±	0.000
2500ppm	0.168±	0.041	0.174±	0.040
5000ppm	0.328±	0.090	0.332±	0.093
10000ppm	0.801±	0.329	0.786±	0.213

(HAN300)

BAIS 4

APPENDIX G 1

HEMATOLOGY : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

Group Name	No. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ³ /μl	
Control	36	8.40±	1.74	14.3±	3.0	41.8±	7.4	50.6±	7.3	17.1±	2.5	33.9±	2.3	807±	368
2500ppm	37	8.39±	0.93	13.5±	2.1	40.2±	4.9	47.9±	3.2	16.1±	1.7*	33.6±	1.8	877±	289
5000ppm	44	8.04±	1.51	13.3±	2.7	39.7±	6.6	50.0±	5.8	16.6±	1.8	33.2±	1.9	883±	300
10000ppm	39	7.93±	1.47	13.2±	2.5	39.4±	6.4	50.2±	4.7	16.8±	1.8	33.5±	1.6	835±	280

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	RETICULOCYTE %	
Control	36	4.6±	6.5
2500ppm	37	3.8±	2.0
5000ppm	44	5.2±	6.5
10000ppm	39	5.3±	4.3

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	WBC 1 O ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	36	6.65±	8.56	1±	1	44±	11	1±	1	0±	0	4±	2	45±	10	4±	14
2500ppm	37	5.51±	4.77	0±	1	44±	11	1±	1	0±	0	4±	1	48±	10	2±	3
5000ppm	44	12.12±	45.71	1±	1	47±	13	1±	1	0±	0	4±	2	41±	13	6±	19
10000ppm	39	5.19±	1.71	1±	1	46±	9	1±	1	0±	0	5±	1	45±	8	2±	4

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

APPENDIX G 2

HEMATOLOGY : FEMALE

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCNC g/dl		PLATELET 10 ³ /μl	
Control	38	7.76±	1.50	14.0±	3.0	40.3±	6.8	52.5±	5.2	17.9±	1.8	34.3±	3.0	626±	200
2500ppm	39	7.93±	1.72	14.4±	2.8	41.4±	7.4	54.5±	11.5	18.7±	2.8	34.6±	1.6	584±	124
5000ppm	38	7.68±	1.53	14.1±	2.4	40.7±	6.2	54.6±	9.5	18.8±	2.3	34.6±	1.5	633±	180
10000ppm	41	7.90±	1.38	14.6±	2.1	42.4±	5.6	55.0±	8.5**	18.8±	1.7	34.3±	1.6**	610±	116

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	RETICULOCYTE %	
Control	38	6.1±	10.4
2500ppm	39	4.4±	6.8
5000ppm	38	4.9±	6.7
10000ppm	41	4.5±	9.4

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	WBC		Differential		WBC (%)											
		1	2	N-BAND		N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	38	3.40±	2.38	1±	1	41±	14	2±	2	0±	0	4±	2	50±	13	3±	12
2500ppm	39	4.58±	6.86	0±	1	37±	12	1±	1	0±	0	4±	2	52±	15	5±	19
5000ppm	38	5.54±	9.91	1±	1	39±	12	2±	1	0±	0	4±	2	49±	15	6±	20
10000ppm	41	5.03±	11.22	1±	1	41±	11	2±	1	0±	0	5±	2	48±	13	5±	19

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

APPENDIX H 1

BIOCHEMISTRY : MALE

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	36	6.8±	0.4	3.1±	0.2	0.8±	0.1	0.22±	0.25	156±	23	189±	53	103±	70
2500ppm	37	6.7±	0.3	3.0±	0.3	0.8±	0.1	0.17±	0.04	151±	15	175±	66	103±	125
5000ppm	44	6.7±	0.4	3.0±	0.2	0.8±	0.1	0.19±	0.13	149±	24	175±	57	101±	68
10000ppm	39	6.6±	0.3*	3.0±	0.3	0.8±	0.1	0.25±	0.37	146±	20	167±	47	94±	69

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST I U/l		ALT I U/l		LDH I U/l		ALP I U/l		G-GTP I U/l		CK I U/l	
Control	36	260±	71	102±	85	43±	16	168±	44	231±	101	7±	3	114±	54
2500ppm	37	244±	87	99±	28	47±	13	173±	44	259±	112	8±	6	103±	18
5000ppm	44	248±	87	117±	93	47±	22	189±	90	265±	126	8±	10	112±	33
10000ppm	39	235±	54	148±	175**	65±	51**	178±	63	271±	96	8±	4	106±	25

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]

MEASURE TIME : 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	36	17.8±	2.1	0.6±	0.1	142±	1	3.7±	0.3	105±	2	10.5±	0.3	4.1±	0.6
2500ppm	37	18.8±	3.8	0.6±	0.1	142±	1	3.7±	0.3	105±	2	10.5±	0.4	4.1±	0.7
5000ppm	44	19.1±	5.3	0.6±	0.1	142±	1	3.8±	0.5	105±	2	10.4±	0.4	4.1±	0.8
10000ppm	39	18.9±	3.5	0.5±	0.1*	142±	2	3.7±	0.3	105±	1	10.3±	0.3	4.0±	0.6

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

APPENDIX H 2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	39	6.8±	0.6	3.5±	0.4	1.1±	0.1	0.17±	0.15	147±	19	125±	24	71±	65
2500ppm	39	7.0±	0.5	3.6±	0.4	1.1±	0.1	0.18±	0.17	146±	17	126±	27	57±	49
5000ppm	38	7.0±	0.5	3.6±	0.3	1.1±	0.1	0.39±	1.47	144±	17	128±	26	52±	38
10000ppm	41	7.0±	0.4	3.6±	0.3	1.1±	0.1	0.21±	0.48**	148±	12	120±	19	40±	31**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/l		ALT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CK IU/l	
Control	39	219±	38	150±	92	57±	26	241±	133	160±	124	2±	1	112±	134
2500ppm	39	221±	50	159±	142	62±	28	265±	229	151±	88	2±	1	93±	30
5000ppm	38	223±	50	189±	215	76±	53	273±	238	180±	119	3±	2	102±	48
10000ppm	41	210±	36	164±	230	71±	69	546±	1992	155±	71	2±	2	94±	54

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0497

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	39	17.4±	3.4	0.5±	0.0	142±	2	3.6±	0.4	104±	2	10.4±	0.5	4.1±	0.8
2500ppm	39	17.5±	3.5	0.5±	0.1	141±	1	3.5±	0.5	103±	2	10.4±	0.4	3.7±	0.7
5000ppm	38	17.4±	2.3	0.5±	0.0	142±	1	3.6±	0.4	103±	2	10.5±	0.4	4.0±	0.9
10000ppm	41	18.8±	3.4*	0.5±	0.0	142±	2	3.6±	0.4	103±	2	10.5±	0.4	4.1±	0.8

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

APPENDIX I 1

URINALYSIS : MALE

STUDY NO. : 0497

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	pH_____							CHI	Protein_____					CHI	Glucose_____					CHI	Ketone body					CHI	Bilirubin				CHI		
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-		+	2+
Control	36	0	1	1	9	20	5	0		0	0	0	2	25	9		36	0	0	0	0	0		32	4	0	0	0	0		35	1	0	0
2500ppm	38	0	1	3	8	23	2	1		0	0	1	0	26	11		38	0	0	0	0	0		33	4	0	0	0	1		37	1	0	0
5000ppm	45	0	2	4	10	21	7	1		0	0	1	2	33	9		45	0	0	0	0	0		41	4	0	0	0	0		45	0	0	0
10000ppm	40	0	5	4	7	19	5	0		0	0	0	4	30	6		40	0	0	0	0	0		35	5	0	0	0	0		37	2	0	1

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of CHI SQUARE

(HCL101)

BATS 4

STUDY NO. : 0497

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	Occult blood					Urobilinogen				
		-	±	+	2+	3+	±	+	2+	3+	4+
Control	36	35	1	0	0	0	36	0	0	0	0
2500ppm	38	35	1	2	0	0	38	0	0	0	0
5000ppm	45	39	4	0	2	0	45	0	0	0	0
10000ppm	40	36	0	1	0	3	39	1	0	0	0

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of CHI SQUARE

(HCL101)

BATS 4

APPENDIX I 2

URINALYSIS : FEMALE

STUDY NO. : 0497

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Bilirubin				CHI		
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-		+	2+
Control	39	0	1	3	1	8	23	3		0	0	8	12	11	8		39	0	0	0	0	0		5	34	0	0	0	0		38	1	0	0
2500ppm	41	0	1	3	5	6	21	5		0	2	5	14	16	4		41	0	0	0	0	0		10	30	1	0	0	0		38	2	0	1
5000ppm	38	0	0	4	3	10	16	5		0	2	10	12	10	4		38	0	0	0	0	0		8	29	1	0	0	0		36	1	0	1
10000ppm	42	0	1	12	12	6	10	1	**	0	5	14	14	9	0	**	42	0	0	0	0	0		22	20	0	0	0	0	**	40	0	1	1

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of CHI SQUARE

(HCL101)

BATS4

STUDY NO. : 0497

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Occult blood					Urobilinogen				
		-	±	+	2+	3+	CHI	±	+	2+	3+ 4+
Control	39	35	1	1	1	1		39	0	0	0 0
2500ppm	41	39	1	0	0	1		39	2	0	0 0
5000ppm	38	36	0	1	0	1		38	0	0	0 0
10000ppm	42	39	0	1	0	2		40	0	1	1 0

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of CHI SQUARE

(HCL101)

BATS 4

APPENDIX J 1

GROSS FINDINGS : MALE

ALL ANIMALS

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		3	(6)	2	(4)	6	(12)	1	(2)
	scab		0	(0)	0	(0)	1	(2)	0	(0)
subcutis	jaundice		0	(0)	0	(0)	0	(0)	1	(2)
	mass		5	(10)	9	(18)	4	(8)	6	(12)
lung	white zone		1	(2)	1	(2)	2	(4)	1	(2)
	red zone		1	(2)	2	(4)	3	(6)	0	(0)
	nodule		1	(2)	1	(2)	2	(4)	0	(0)
lymph node	enlarged		1	(2)	2	(4)	5	(10)	2	(4)
spleen	enlarged		4	(8)	4	(8)	4	(8)	4	(8)
	white zone		1	(2)	2	(4)	0	(0)	0	(0)
	black zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		0	(0)	2	(4)	0	(0)	0	(0)
	deformed		0	(0)	0	(0)	0	(0)	1	(2)
heart	white zone		2	(4)	1	(2)	1	(2)	1	(2)
	hypertrophy		0	(0)	0	(0)	1	(2)	0	(0)
	dilated		0	(0)	0	(0)	0	(0)	1	(2)
	fluid		1	(2)	0	(0)	0	(0)	0	(0)
salivary gl	enlarged		1	(2)	0	(0)	0	(0)	0	(0)
forestomach	ulcer		1	(2)	1	(2)	1	(2)	0	(0)
gl stomach	ulcer		0	(0)	1	(2)	0	(0)	0	(0)
small intes	nodule		1	(2)	3	(6)	1	(2)	0	(0)
	diverticula		0	(0)	0	(0)	1	(2)	0	(0)

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
liver	enlarged		2	(4)	0	(0)	0	(0)	0	(0)
	pale		0	(0)	1	(2)	1	(2)	0	(0)
	white zone		0	(0)	2	(4)	0	(0)	1	(2)
	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		3	(6)	2	(4)	1	(2)	3	(6)
	rough		1	(2)	1	(2)	1	(2)	1	(2)
	granular		0	(0)	0	(0)	1	(2)	1	(2)
	herniation		8	(16)	2	(4)	6	(12)	9	(18)
kidney	dark		0	(0)	0	(0)	0	(0)	1	(2)
	white zone		0	(0)	1	(2)	0	(0)	1	(2)
	nodule		1	(2)	2	(4)	0	(0)	0	(0)
	granular		11	(22)	14	(28)	16	(32)	15	(30)
urin bladd	nodule		1	(2)	1	(2)	0	(0)	0	(0)
	urine:marked retention		3	(6)	1	(2)	0	(0)	1	(2)
	urine:red		0	(0)	0	(0)	0	(0)	2	(4)
pituitary	enlarged		6	(12)	8	(16)	8	(16)	3	(6)
	red zone		4	(8)	6	(12)	5	(10)	2	(4)
	nodule		5	(10)	3	(6)	2	(4)	6	(12)
	cyst		1	(2)	0	(0)	0	(0)	1	(2)
thyroid	enlarged		2	(4)	3	(6)	3	(6)	5	(10)
	red		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		1	(2)	1	(2)	3	(6)	2	(4)

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
adrenal	enlarged		0	(0)	1	(2)	2	(4)	1	(2)
	cyst		0	(0)	0	(0)	0	(0)	1	(2)
testis	atrophic		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		30	(60)	31	(62)	37	(74)	35	(70)
prostate	nodule		0	(0)	1	(2)	0	(0)	0	(0)
prep/cli gl	nodule		2	(4)	0	(0)	0	(0)	1	(2)
brain	red zone		0	(0)	1	(2)	0	(0)	0	(0)
	brown zone		1	(2)	0	(0)	0	(0)	0	(0)
	deformed		0	(0)	0	(0)	1	(2)	0	(0)
spinal cord	red zone		1	(2)	1	(2)	0	(0)	0	(0)
eye	turbid		1	(2)	0	(0)	1	(2)	0	(0)
	white		8	(16)	4	(8)	4	(8)	1	(2)
	red		2	(4)	0	(0)	0	(0)	0	(0)
Harder gl	nodule		1	(2)	0	(0)	0	(0)	0	(0)
Zymbal gl	nodule		1	(2)	0	(0)	0	(0)	0	(0)
bone	nodule		0	(0)	0	(0)	2	(4)	0	(0)
pleura	nodule		1	(2)	0	(0)	0	(0)	0	(0)
mediastinum	nodule		1	(2)	0	(0)	0	(0)	0	(0)
peritoneum	nodule		1	(2)	2	(4)	3	(6)	1	(2)
abdominal c	hemorrhage		1	(2)	1	(2)	0	(0)	0	(0)
	ascites		0	(0)	0	(0)	1	(2)	1	(2)
thoracic ca	pleural fluid		0	(0)	1	(2)	1	(2)	0	(0)

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
other	upper jaw:nodule		1	(2)	0	(0)	0	(0)	0	(0)
	nose:nodule		1	(2)	0	(0)	0	(0)	0	(0)
	tail:scab		0	(0)	0	(0)	1	(2)	0	(0)
whole body	anemic		0	(0)	0	(0)	2	(4)	0	(0)

(HPT080)

BATS 4

APPENDIX J 2

GROSS FINDINGS : MALE DEAD AND MORIBUND ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			14	(%)	13	(%)	5	(%)	10	(%)
skin/app	nodule		0	(0)	1	(8)	1	(20)	1	(10)
subcutis	jaundice		0	(0)	0	(0)	0	(0)	1	(10)
	mass		2	(14)	6	(46)	0	(0)	2	(20)
lung	red zone		0	(0)	1	(8)	1	(20)	0	(0)
	nodule		1	(7)	1	(8)	0	(0)	0	(0)
lymph node	enlarged		1	(7)	1	(8)	0	(0)	0	(0)
spleen	enlarged		2	(14)	3	(23)	0	(0)	2	(20)
	black zone		1	(7)	0	(0)	0	(0)	0	(0)
	nodule		0	(0)	2	(15)	0	(0)	0	(0)
heart	white zone		1	(7)	0	(0)	0	(0)	1	(10)
	hypertrophy		0	(0)	0	(0)	1	(20)	0	(0)
	fluid		1	(7)	0	(0)	0	(0)	0	(0)
salivary gl	enlarged		1	(7)	0	(0)	0	(0)	0	(0)
forestomach	ulcer		0	(0)	1	(8)	1	(20)	0	(0)
gl stomach	ulcer		0	(0)	1	(8)	0	(0)	0	(0)
small intes	nodule		0	(0)	1	(8)	0	(0)	0	(0)
liver	enlarged		1	(7)	0	(0)	0	(0)	0	(0)
	pale		0	(0)	1	(8)	0	(0)	0	(0)
	white zone		0	(0)	1	(8)	0	(0)	1	(10)
	nodule		1	(7)	1	(8)	0	(0)	0	(0)
	granular		0	(0)	0	(0)	0	(0)	1	(10)
	herniation		1	(7)	2	(15)	1	(20)	2	(20)

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			14	(%)	13	(%)	5	(%)	10	(%)
kidney	dark		0	(0)	0	(0)	0	(0)	1	(10)
	nodule		0	(0)	1	(8)	0	(0)	0	(0)
	granular		1	(7)	2	(15)	1	(20)	1	(10)
urin bladd	nodule		1	(7)	0	(0)	0	(0)	0	(0)
	urine:marked retention		3	(21)	1	(8)	0	(0)	1	(10)
	urine:red		0	(0)	0	(0)	0	(0)	2	(20)
pituitary	enlarged		3	(21)	4	(31)	1	(20)	2	(20)
	red zone		0	(0)	2	(15)	0	(0)	1	(10)
	nodule		1	(7)	2	(15)	0	(0)	3	(30)
thyroid	enlarged		0	(0)	1	(8)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(10)
adrenal	enlarged		0	(0)	0	(0)	1	(20)	0	(0)
testis	atrophic		1	(7)	0	(0)	0	(0)	0	(0)
	nodule		4	(29)	2	(15)	2	(40)	3	(30)
prep/cli gl	nodule		1	(7)	0	(0)	0	(0)	0	(0)
brain	red zone		0	(0)	1	(8)	0	(0)	0	(0)
	brown zone		1	(7)	0	(0)	0	(0)	0	(0)
	deformed		0	(0)	0	(0)	1	(20)	0	(0)
spinal cord	red zone		1	(7)	1	(8)	0	(0)	0	(0)
eye	turbid		1	(7)	0	(0)	0	(0)	0	(0)
	white		1	(7)	0	(0)	0	(0)	1	(10)
	red		2	(14)	0	(0)	0	(0)	0	(0)

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			14	(%)	13	(%)	5	(%)	10	(%)
Harder gl	nodule		1	(7)	0	(0)	0	(0)	0	(0)
Zymbal gl	nodule		1	(7)	0	(0)	0	(0)	0	(0)
pleura	nodule		1	(7)	0	(0)	0	(0)	0	(0)
mediastinum	nodule		1	(7)	0	(0)	0	(0)	0	(0)
peritoneum	nodule		1	(7)	1	(8)	1	(20)	0	(0)
abdominal c	hemorrhage		1	(7)	1	(8)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(8)	1	(20)	0	(0)
other	nose:nodule		1	(7)	0	(0)	0	(0)	0	(0)
	tail:scab		0	(0)	0	(0)	1	(20)	0	(0)
whole body	anemic		0	(0)	0	(0)	2	(40)	0	(0)

(HPT080)

BATS 4

APPENDIX J 3

GROSS FINDINGS : MALE SACRIFICED ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			36	(%)	37	(%)	45	(%)	40	(%)
skin/app	nodule		3	(8)	1	(3)	5	(11)	0	(0)
	scab		0	(0)	0	(0)	1	(2)	0	(0)
subcutis	mass		3	(8)	3	(8)	4	(9)	4	(10)
lung	white zone		1	(3)	1	(3)	2	(4)	1	(3)
	red zone		1	(3)	1	(3)	2	(4)	0	(0)
	nodule		0	(0)	0	(0)	2	(4)	0	(0)
lymph node	enlarged		0	(0)	1	(3)	5	(11)	2	(5)
spleen	enlarged		2	(6)	1	(3)	4	(9)	2	(5)
	white zone		1	(3)	2	(5)	0	(0)	0	(0)
	deformed		0	(0)	0	(0)	0	(0)	1	(3)
heart	white zone		1	(3)	1	(3)	1	(2)	0	(0)
	dilated		0	(0)	0	(0)	0	(0)	1	(3)
forestomach	ulcer		1	(3)	0	(0)	0	(0)	0	(0)
small intes	nodule		1	(3)	2	(5)	1	(2)	0	(0)
	diverticula		0	(0)	0	(0)	1	(2)	0	(0)
liver	enlarged		1	(3)	0	(0)	0	(0)	0	(0)
	pale		0	(0)	0	(0)	1	(2)	0	(0)
	white zone		0	(0)	1	(3)	0	(0)	0	(0)
	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		2	(6)	1	(3)	1	(2)	3	(8)
	rough		1	(3)	1	(3)	1	(2)	1	(3)
	granular		0	(0)	0	(0)	1	(2)	0	(0)

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			36	(%)	37	(%)	45	(%)	40	(%)
liver	herniation		7	(19)	0	(0)	5	(11)	7	(18)
kidney	white zone		0	(0)	1	(3)	0	(0)	1	(3)
	nodule		1	(3)	1	(3)	0	(0)	0	(0)
	granular		10	(28)	12	(32)	15	(33)	14	(35)
urin bladd	nodule		0	(0)	1	(3)	0	(0)	0	(0)
pituitary	enlarged		3	(8)	4	(11)	7	(16)	1	(3)
	red zone		4	(11)	4	(11)	5	(11)	1	(3)
	nodule		4	(11)	1	(3)	2	(4)	3	(8)
	cyst		1	(3)	0	(0)	0	(0)	1	(3)
thyroid	enlarged		2	(6)	2	(5)	3	(7)	5	(13)
	red		0	(0)	0	(0)	0	(0)	1	(3)
	nodule		1	(3)	1	(3)	3	(7)	1	(3)
adrenal	enlarged		0	(0)	1	(3)	1	(2)	1	(3)
	cyst		0	(0)	0	(0)	0	(0)	1	(3)
testis	nodule		26	(72)	29	(78)	35	(78)	32	(80)
prostate	nodule		0	(0)	1	(3)	0	(0)	0	(0)
prep/cli gl	nodule		1	(3)	0	(0)	0	(0)	1	(3)
eye	turbid		0	(0)	0	(0)	1	(2)	0	(0)
	white		7	(19)	4	(11)	4	(9)	0	(0)
bone	nodule		0	(0)	0	(0)	2	(4)	0	(0)
peritoneum	nodule		0	(0)	1	(3)	2	(4)	1	(3)
abdominal c	ascites		0	(0)	0	(0)	1	(2)	1	(3)

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name		Control		2500ppm		5000ppm		10000ppm	
		NO. of Animals		36	(%)	37	(%)	45	(%)	40	(%)
other	upper jaw:nodule			1	(3)	0	(0)	0	(0)	0	(0)

(HPT080)

BAIS 4

APPENDIX J 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		3	(6)	1	(2)	4	(8)	1	(2)
	scab		1	(2)	1	(2)	1	(2)	0	(0)
subcutis	edema		0	(0)	1	(2)	0	(0)	0	(0)
	jaundice		0	(0)	1	(2)	1	(2)	1	(2)
	mass		5	(10)	4	(8)	8	(16)	3	(6)
lung	white zone		0	(0)	2	(4)	2	(4)	1	(2)
	edema		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		0	(0)	1	(2)	1	(2)	1	(2)
lymph node	enlarged		1	(2)	1	(2)	0	(0)	0	(0)
spleen	enlarged		7	(14)	7	(14)	6	(12)	3	(6)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
tongue	nodule		0	(0)	0	(0)	0	(0)	1	(2)
forestomach	ulcer		1	(2)	1	(2)	0	(0)	0	(0)
	erosion		0	(0)	1	(2)	0	(0)	0	(0)
gl stomach	erosion		0	(0)	0	(0)	1	(2)	0	(0)
cecum	nodule		0	(0)	1	(2)	0	(0)	0	(0)
liver	white zone		0	(0)	3	(6)	5	(10)	2	(4)
	red zone		2	(4)	0	(0)	0	(0)	0	(0)
	nodule		0	(0)	3	(6)	1	(2)	1	(2)
	deformed		0	(0)	0	(0)	1	(2)	0	(0)
	rough		2	(4)	1	(2)	3	(6)	2	(4)
	nodular		0	(0)	1	(2)	0	(0)	1	(2)

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
liver	herniation		12	(24)	11	(22)	7	(14)	10	(20)
pancreas	nodule		0	(0)	1	(2)	0	(0)	0	(0)
kidney	deformed		0	(0)	1	(2)	0	(0)	0	(0)
	granular		2	(4)	0	(0)	1	(2)	2	(4)
	hydronephrosis		0	(0)	0	(0)	0	(0)	1	(2)
urin bladd	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	urine:marked retention		1	(2)	0	(0)	1	(2)	3	(6)
pituitary	enlarged		9	(18)	8	(16)	4	(8)	3	(6)
	red zone		8	(16)	10	(20)	12	(24)	15	(30)
	black zone		1	(2)	1	(2)	0	(0)	2	(4)
	nodule		0	(0)	4	(8)	8	(16)	3	(6)
	cyst		1	(2)	0	(0)	0	(0)	0	(0)
thyroid	enlarged		1	(2)	1	(2)	0	(0)	1	(2)
	red zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		1	(2)	2	(4)	0	(0)	0	(0)
adrenal	enlarged		0	(0)	1	(2)	1	(2)	0	(0)
ovary	enlarged		0	(0)	0	(0)	1	(2)	1	(2)
	cyst		0	(0)	0	(0)	1	(2)	0	(0)
uterus	nodule		5	(10)	8	(16)	9	(18)	11	(22)
	cyst		0	(0)	0	(0)	1	(2)	0	(0)
vagina	nodule		1	(2)	0	(0)	0	(0)	0	(0)
prep/cli gl	nodule		1	(2)	1	(2)	1	(2)	0	(0)

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
brain	enlarged		1	(2)	0	(0)	0	(0)	0	(0)
	red zone		1	(2)	1	(2)	1	(2)	0	(0)
	brown zone		1	(2)	0	(0)	0	(0)	0	(0)
eye	turbid		0	(0)	2	(4)	0	(0)	0	(0)
	white		2	(4)	2	(4)	4	(8)	4	(8)
muscle	nodule		2	(4)	1	(2)	0	(0)	0	(0)
bone	nodule		0	(0)	0	(0)	1	(2)	0	(0)
peritoneum	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	mass		0	(0)	0	(0)	1	(2)	0	(0)
retroperit	mass		1	(2)	1	(2)	0	(0)	0	(0)
abdominal c	hemorrhage		1	(2)	0	(0)	0	(0)	0	(0)
	ascites		1	(2)	1	(2)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	0	(0)	1	(2)	1	(2)
whole body	anemic		0	(0)	0	(0)	0	(0)	2	(4)

APPENDIX J 5

GROSS FINDINGS : FEMALE DEAD AND MORIBUND ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			11	(%)	10	(%)	12	(%)	9	(%)
skin/app	scab		0	(0)	1	(10)	0	(0)	0	(0)
subcutis	edema		0	(0)	1	(10)	0	(0)	0	(0)
	jaundice		0	(0)	1	(10)	0	(0)	1	(11)
	mass		2	(18)	1	(10)	1	(8)	1	(11)
lung	edema		1	(9)	0	(0)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	1	(8)	0	(0)
lymph node	enlarged		1	(9)	0	(0)	0	(0)	0	(0)
spleen	enlarged		2	(18)	4	(40)	4	(33)	1	(11)
forestomach	erosion		0	(0)	1	(10)	0	(0)	0	(0)
gl stomach	erosion		0	(0)	0	(0)	1	(8)	0	(0)
liver	white zone		0	(0)	0	(0)	1	(8)	0	(0)
	nodule		0	(0)	1	(10)	1	(8)	0	(0)
	rough		1	(9)	1	(10)	2	(17)	2	(22)
	herniation		3	(27)	2	(20)	1	(8)	1	(11)
pancreas	nodule		0	(0)	1	(10)	0	(0)	0	(0)
kidney	hydronephrosis		0	(0)	0	(0)	0	(0)	1	(11)
urin bladd	urine:marked retention		1	(9)	0	(0)	1	(8)	3	(33)
pituitary	enlarged		1	(9)	2	(20)	3	(25)	2	(22)
	red zone		0	(0)	2	(20)	2	(17)	0	(0)
	black zone		1	(9)	1	(10)	0	(0)	2	(22)
	nodule		0	(0)	0	(0)	2	(17)	0	(0)
ovary	enlarged		0	(0)	0	(0)	1	(8)	0	(0)

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			11	(%)	10	(%)	12	(%)	9	(%)
uterus	nodule		1	(9)	4	(40)	3	(25)	4	(44)
vagina	nodule		1	(9)	0	(0)	0	(0)	0	(0)
brain	enlarged		1	(9)	0	(0)	0	(0)	0	(0)
	red zone		1	(9)	1	(10)	1	(8)	0	(0)
	brown zone		1	(9)	0	(0)	0	(0)	0	(0)
eye	turbid		0	(0)	1	(10)	0	(0)	0	(0)
	white		0	(0)	0	(0)	0	(0)	2	(22)
muscle	nodule		0	(0)	1	(10)	0	(0)	0	(0)
bone	nodule		0	(0)	0	(0)	1	(8)	0	(0)
peritoneum	nodule		0	(0)	1	(10)	0	(0)	0	(0)
	mass		0	(0)	0	(0)	1	(8)	0	(0)
retroperit	mass		1	(9)	1	(10)	0	(0)	0	(0)
abdominal c	hemorrhage		1	(9)	0	(0)	0	(0)	0	(0)
	ascites		1	(9)	1	(10)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	0	(0)	1	(8)	0	(0)
whole body	anemic		0	(0)	0	(0)	0	(0)	1	(11)

APPENDIX J 6

GROSS FINDINGS : FEMALE SACRIFICED ANIMALS

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			39	(%)	40	(%)	38	(%)	41	(%)
skin/app	nodule		3	(8)	1	(3)	4	(11)	1	(2)
	scab		1	(3)	0	(0)	1	(3)	0	(0)
subcutis	jaundice		0	(0)	0	(0)	1	(3)	0	(0)
	mass		3	(8)	3	(8)	7	(18)	2	(5)
lung	white zone		0	(0)	2	(5)	2	(5)	1	(2)
	nodule		0	(0)	1	(3)	0	(0)	1	(2)
lymph node	enlarged		0	(0)	1	(3)	0	(0)	0	(0)
spleen	enlarged		5	(13)	3	(8)	2	(5)	2	(5)
	nodule		0	(0)	0	(0)	1	(3)	0	(0)
tongue	nodule		0	(0)	0	(0)	0	(0)	1	(2)
forestomach	ulcer		1	(3)	1	(3)	0	(0)	0	(0)
cecum	nodule		0	(0)	1	(3)	0	(0)	0	(0)
liver	white zone		0	(0)	3	(8)	4	(11)	2	(5)
	red zone		2	(5)	0	(0)	0	(0)	0	(0)
	nodule		0	(0)	2	(5)	0	(0)	1	(2)
	deformed		0	(0)	0	(0)	1	(3)	0	(0)
	rough		1	(3)	0	(0)	1	(3)	0	(0)
	nodular		0	(0)	1	(3)	0	(0)	1	(2)
	herniation		9	(23)	9	(23)	6	(16)	9	(22)
kidney	deformed		0	(0)	1	(3)	0	(0)	0	(0)
	granular		2	(5)	0	(0)	1	(3)	2	(5)
urin bladd	nodule		0	(0)	1	(3)	0	(0)	0	(0)

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		2500ppm		5000ppm		10000ppm	
			39	(%)	40	(%)	38	(%)	41	(%)
pituitary	enlarged		8	(21)	6	(15)	1	(3)	1	(2)
	red zone		8	(21)	8	(20)	10	(26)	15	(37)
	nodule		0	(0)	4	(10)	6	(16)	3	(7)
	cyst		1	(3)	0	(0)	0	(0)	0	(0)
thyroid	enlarged		1	(3)	1	(3)	0	(0)	1	(2)
	red zone		1	(3)	0	(0)	0	(0)	0	(0)
	nodule		1	(3)	2	(5)	0	(0)	0	(0)
adrenal	enlarged		0	(0)	1	(3)	1	(3)	0	(0)
ovary	enlarged		0	(0)	0	(0)	0	(0)	1	(2)
	cyst		0	(0)	0	(0)	1	(3)	0	(0)
uterus	nodule		4	(10)	4	(10)	6	(16)	7	(17)
	cyst		0	(0)	0	(0)	1	(3)	0	(0)
prep/cli gl	nodule		1	(3)	1	(3)	1	(3)	0	(0)
eye	turbid		0	(0)	1	(3)	0	(0)	0	(0)
	white		2	(5)	2	(5)	4	(11)	2	(5)
muscle	nodule		2	(5)	0	(0)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	0	(0)	0	(0)	1	(2)
whole body	anemic		0	(0)	0	(0)	0	(0)	1	(2)

APPENDIX K 1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
 SURVIVAL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	Body Weight	ADRENALS		TESTES		HEART		LUNGS		KIDNEYS	
Control	36	390± 35	0.066±	0.009	2.770±	1.193	1.215±	0.102	1.356±	0.191	2.767±	0.417
2500ppm	37	382± 28	0.081±	0.054*	2.868±	1.215	1.204±	0.099	1.331±	0.101	2.789±	0.334
5000ppm	44	378± 26	0.092±	0.116**	2.961±	1.300	1.214±	0.104	1.450±	0.630	2.782±	0.267
10000ppm	39	366± 30**	0.088±	0.121	2.866±	1.140	1.166±	0.088	1.336±	0.266	2.849±	0.245

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	36	1.458±	2.238	11.282±	3.522	2.062±	0.047
2500ppm	37	1.044±	0.383	10.933±	1.795	2.068±	0.048
5000ppm	44	1.448±	2.178	11.105±	1.940	2.059±	0.045
10000ppm	39	1.260±	1.329	10.328±	1.241	2.063±	0.034

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL040)

BAIS 4

APPENDIX K 2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105#)

PAGE : 3

Group Name	NO. of Animals	Body Weight		ADRENALS		OVARIES		HEART		LUNGS		KIDNEYS	
Control	39	254±	39	0.075±	0.015	0.119±	0.025	0.895±	0.090	1.059±	0.409	1.806±	0.133
2500ppm	40	241±	26	0.100±	0.176	0.128±	0.022	0.893±	0.092	1.037±	0.267	1.787±	0.134
5000ppm	38	242±	29	0.076±	0.041	0.151±	0.185	0.860±	0.085	1.005±	0.161	1.809±	0.148
10000ppm	41	227±	21**	0.067±	0.007*	0.142±	0.097	0.853±	0.071	0.952±	0.153	1.891±	0.175*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
 SURVIVAL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	39	1.148±	1.790	6.923±	1.585	1.892±	0.048
2500ppm	40	1.169±	2.153	6.990±	1.885	1.891±	0.043
5000ppm	38	1.031±	1.507	6.772±	1.367	1.881±	0.034
10000ppm	41	0.810±	1.199	6.434±	0.949	1.864±	0.058
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HCL040)

BAIS 4

APPENDIX L 1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
 SURVIVAL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	36	390± 35	0.017± 0.003	0.713± 0.298	0.314± 0.033	0.350± 0.051	0.714± 0.114
2500ppm	37	382± 28	0.021± 0.013*	0.749± 0.303	0.316± 0.024	0.350± 0.037	0.734± 0.105
5000ppm	44	378± 26	0.024± 0.029**	0.784± 0.341	0.322± 0.036	0.388± 0.196	0.738± 0.086
10000ppm	39	366± 30**	0.025± 0.035*	0.784± 0.310	0.319± 0.021	0.368± 0.089	0.783± 0.101*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	36	0.381± 0.622	2.892± 0.792	0.533± 0.044
2500ppm	37	0.275± 0.105	2.872± 0.472	0.544± 0.035
5000ppm	44	0.390± 0.618	2.950± 0.576	0.547± 0.036
10000ppm	39	0.349± 0.379	2.831± 0.377	0.567± 0.049**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett

(HCL042)

BAIS 4

APPENDIX L 2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
 SURVIVAL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	39	254± 39	0.030± 0.009	0.047± 0.008	0.359± 0.053	0.424± 0.156	0.726± 0.116
2500ppm	40	241± 26	0.044± 0.083	0.054± 0.013*	0.376± 0.069	0.445± 0.197	0.751± 0.121
5000ppm	38	242± 29	0.032± 0.018	0.063± 0.080	0.358± 0.037	0.421± 0.084	0.755± 0.088
10000ppm	41	227± 21**	0.030± 0.003	0.063± 0.043**	0.378± 0.034**	0.424± 0.092	0.839± 0.110**

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(ICL042)

BAIS 4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	39	0.463± 0.703	2.759± 0.590	0.762± 0.120
2500ppm	40	0.570± 1.299	2.982± 1.310	0.793± 0.097
5000ppm	38	0.432± 0.636	2.795± 0.420	0.789± 0.111
10000ppm	41	0.374± 0.605	2.846± 0.426	0.829± 0.085*

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$

Test of Dunnett

(ICL042)

BAIS 4

APPENDIX M 1

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
ALL ANIMALS

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Integumentary system/appandage}																		
skin/app	inflammation		<50>				<50>				<50>				<50>			
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	scab		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	
		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	
subcutis	hematoma		<50>				<50>				<50>				<50>			
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
{Respiratory system}																		
nasal cavit	thrombus		<50>				<50>				<49>				<50>			
		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
		9 (18)	0 (0)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)	13 (26)	0 (0)	0 (0)	0 (0)
	mineralization		9 (18)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)	13 (26)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 2

Organ_____	Findings_____	Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Respiratory system}

nasal cavit		<50>					<50>					<49>				<50>				
	hyper plasia:cartilage	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	eosinophilic change:olfactory epithelium	19	18	0	0	20	15	0	0	12	25	0	0	18	24	1	0			
		(38)	(36)	(0)	(0)	(40)	(30)	(0)	(0)	(24)	(51)	(0)	(0)	(36)	(48)	(2)	(0)			
	eosinophilic change:respiratory epithelium	7	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0			
		(14)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)			
	inflammation:foreign body	11	2	0	0	14	4	0	0	14	6	0	0	7	4	0	0			
		(22)	(4)	(0)	(0)	(28)	(8)	(0)	(0)	(29)	(12)	(0)	(0)	(14)	(8)	(0)	(0)			
	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0			
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(6)	(0)	(0)	(0)				
respiratory metaplasia:olfactory epithelium	2	0	0	0	1	0	0	0	3	0	0	0	2	0	0	0				
	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)				
respiratory metaplasia:gland	12	0	0	0	6	0	0	0	5	0	0	0	7	0	0	0				
	(24)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)				
squamous cell metaplasia:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0				
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)				

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 3

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit		<50>					<50>				<49>				<50>			
	atrophy:olfactory epithelium	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)
lung		<50>					<50>				<50>				<50>			
	congestion	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
	bronchiolar-alveolar cell hyperplasia	0	1	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	
	inflammation:foreign body	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
{Hematopoietic system}																		
bone marrow		<50>					<50>				<49>				<50>			
	granulation	1	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study				Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
bone marrow		<50>				<50>				<49>				<50>							
	increased hematopoiesis	5	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0				
		(10)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
lymph node		<50>				<50>				<50>				<50>							
	deposit of hemosiderin	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
	granulation	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
spleen		<50>				<50>				<50>				<50>							
	congestion	6	1	0	0	6	0	0	0	7	0	0	0	7	0	0	0				
		(12)	(2)	(0)	(0)	(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)				
	deposit of hemosiderin	13	10	0	0	11	4	0	0	13	1	0	0 *	9	4	0	0				
		(26)	(20)	(0)	(0)	(22)	(8)	(0)	(0)	(26)	(2)	(0)	(0)	(18)	(8)	(0)	(0)				
		<50>				<50>				<50>				<50>							
	fibrosis:focal	1	1	0	0	0	2	0	0	0	0	0	0	1	1	0	0				
		(2)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)				

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<50>				<50>				<50>				<50>			
	increased extramedullary hematopoiesis		3	1	1	0	3	2	1	0	6	2	0	0	5	2	0	0
			(6)	(2)	(2)	(0)	(6)	(4)	(2)	(0)	(12)	(4)	(0)	(0)	(10)	(4)	(0)	(0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	myocardial fibrosis		27	3	0	0	31	5	0	0	29	3	0	0	31	3	0	0
			(54)	(6)	(0)	(0)	(62)	(10)	(0)	(0)	(58)	(6)	(0)	(0)	(62)	(6)	(0)	(0)
	subendocardial fibrosis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 6

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
tongue			<50>				<50>				<50>				<50>			
	arteritis		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach			<50>				<50>				<50>				<50>			
	epidermal cyst		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:forestomach		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	ulcer:forestomach		1	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
erosion:glandular stomach		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
ulcer:glandular stomach		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
small intes			<50>				<50>				<50>				<50>			
	diverticula		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study				Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
small intes	inflammation	<50>				<50>				<50>				<50>				<50>			
		0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	herniation	<50>				<50>				<50>				<50>				<50>			
		8	0	0	0	2	0	0	0	6	0	0	0	9	0	0	0	9	0	0	0
		(16)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
	thrombus	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:central	0	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	6	2	0	0	4	4	0	0	4	2	0	0	4	0	0	0	4	0	0	0
		(12)	(4)	(0)	(0)	(8)	(8)	(0)	(0)	(8)	(4)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
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REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 8

Organ_____	Findings_____	Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	inflammatory cell nest		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	clear cell focus		3	2	0	0	3	0	0	0	3	1	0	0	1	1	0	0
			(6)	(4)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
	acidophilic cell focus		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	basophilic cell focus		1	0	0	0	4	1	0	0	1	0	0	0	2	0	0	0
		(2)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
pancreas	spongiosis hepatitis		3	0	0	0	4	0	0	0	3	0	0	0	1	2	0	0
			(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(4)	(0)	(0)
	bile duct hyperplasia		4	46	0	0	3	46	0	0	3	47	0	0	10	39	0	0
			(8)	(92)	(0)	(0)	(6)	(92)	(0)	(0)	(6)	(94)	(0)	(0)	(20)	(78)	(0)	(0)
	focal fatty change		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	atrophy		<50>				<50>				<50>				<50>			
			7	5	0	0	7	9	1	0	9	8	0	0	4	9	0	0
		(14)	(10)	(0)	(0)	(14)	(18)	(2)	(0)	(18)	(16)	(0)	(0)	(8)	(18)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas	arteritis		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney	scar		<50>				<50>				<50>				<50>			
			1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		13	30	3	0	8	34	3	1	8	35	5	0	12	33	2	0
			(26)	(60)	(6)	(0)	(16)	(68)	(6)	(2)	(16)	(70)	(10)	(0)	(24)	(66)	(4)	(0)
	tubular necrosis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	papillary necrosis		0	1	0	0	1	0	0	0	0	0	0	0	3	1	0	0
			(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(2)	(0)	(0)
	mineralization:papilla		0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0 *
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	mineralization:pelvis		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Urinary system}																		
kidney	mineralization:cortex		<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
	urothelial hyperplasia:pelvis		1	0	0	0	1	0	0	0	1	0	0	0	5	3	0	0 *
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(10)	(6)	(0)	(0)
urin bladd	inflammation		<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
{Endocrine system}																		
pituitary	angiectasis		<50>				<50>				<50>				<50>			
		1	1	0	0	1	0	0	0	1	0	0	0	2	0	0	0	
		(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
	cyst		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hyperplasia		6	3	0	0	4	0	0	0	8	4	0	0	4	4	0	0
			(12)	(6)	(0)	(0)	(8)	(0)	(0)	(0)	(16)	(8)	(0)	(0)	(8)	(8)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	Rathke pouch		2 (4)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
thyroid			<50>				<50>				<50>				<50>			
	follicular hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	C-cell hyperplasia		6 (12)	6 (12)	0 (0)	0 (0)	10 (20)	4 (8)	0 (0)	0 (0)	9 (18)	5 (10)	0 (0)	0 (0)	3 (6)	2 (4)	0 (0)	0 (0)
adrenal			<50>				<50>				<50>				<50>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	hyperplasia:medulla		3 (6)	1 (2)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	2 (4)	0 (0)	0 (0)	2 (4)	2 (4)	0 (0)	0 (0)
	focal fatty change:cortex		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	atrophy		0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis	mineralization		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		1	4	0	0	5	2	0	0	4	2	0	0	4	1	0	0
			(2)	(8)	(0)	(0)	(10)	(4)	(0)	(0)	(8)	(4)	(0)	(0)	(8)	(2)	(0)	(0)
	interstitial cell hyperplasia		17	1	0	0	14	0	0	0	16	2	0	0	16	3	0	0
			(34)	(2)	(0)	(0)	(28)	(0)	(0)	(0)	(32)	(4)	(0)	(0)	(32)	(6)	(0)	(0)
prostate	inflammation		<50>				<50>				<50>				<50>			
			0	0	0	0	0	2	0	0	0	2	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia		4	1	0	0	9	3	0	0	8	1	0	0	5	2	0	0
			(8)	(2)	(0)	(0)	(18)	(6)	(0)	(0)	(16)	(2)	(0)	(0)	(10)	(4)	(0)	(0)
mammary gl	galactoceles		<50>				<50>				<50>				<50>			
			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain	inflammation		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 13

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	cataract		6 (12)	1 (2)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	retinal atrophy		12 (24)	14 (28)	0 (0)	0 (0)	13 (26)	5 (10)	0 (0)	0 (0)	10 (20)	7 (14)	0 (0)	0 (0)	21 (42)	4 (8)	0 (0)	0 * (0)
	keratitis		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hemorrhage:cornea		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Harder gl			<50>				<50>				<50>				<50>			
	degeneration		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Musculoskeletal system}																		
bone			<50>				<50>				<49>				<50>			
	osteosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

[illegible][illegible]

(HPT150)

BAIS4

APPENDIX M 2

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 1

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control 14				2500ppm 13				5000ppm 5				10000ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appendage}																		
skin/app	scab		<14>				<13>				< 5>				<10>			
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	epidermal cyst		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
		{Respiratory system}																
nasal cavit	thrombus		<14>				<13>				< 5>				<10>			
		1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization		3 (21)	0 (0)	0 (0)	0 (0)	3 (23)	0 (0)	0 (0)	0 (0)	2 (40)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
			eosinophilic change:olfactory epithelium		4 (29)	2 (14)	0 (0)	0 (0)	3 (23)	1 (8)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	3 (30)	4 (40)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			14				13				5				10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	eosinophilic change:respiratory epithelium		<14>				<13>				< 5>				<10>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation:foreign body		1	0	0	0	6	0	0	0	1	0	0	0	2	0	0	0
			(7)	(0)	(0)	(0)	(46)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(14)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	respiratory metaplasia:gland		3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(21)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	
lung	squamous cell metaplasia:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(10)	(0)	(0)	(0)
	congestion		<14>				<13>				< 5>				<10>			
			1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(7)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe

< a > a : Number of animals examined at the site

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study				Control				2500ppm				5000ppm				10000ppm			
		Grade				14				13				5				10			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
lung		<14>				<13>				< 5>				<10>							
	inflammatory infiltration	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																					
bone marrow		<14>				<13>				< 5>				<10>							
	increased hematopoiesis	4	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(29)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen		<14>				<13>				< 5>				<10>							
	congestion	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin	4	4	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0
		(29)	(29)	(0)	(0)	(8)	(8)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study Grade	Control 14				2500ppm 13				5000ppm 5				10000ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Hematopoietic system}

spleen			<14>				<13>				< 5>				<10>			
	increased extramedullary hematopoiesis		0	1	0	0	1	2	1	0	0	2	0	0	0	1	0	0
			(0)	(7)	(0)	(0)	(8)	(15)	(8)	(0)	(0)	(40)	(0)	(0)	(0)	(10)	(0)	(0)

{Circulatory system}

heart			<14>				<13>				< 5>				<10>			
	thrombus		0	1	0	0	0	0	0	0	2	0	0	0 *	0	0	0	0
			(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	myocardial fibrosis		9	2	0	0	5	2	0	0	3	1	0	0	7	2	0	0
			(64)	(14)	(0)	(0)	(38)	(15)	(0)	(0)	(60)	(20)	(0)	(0)	(70)	(20)	(0)	(0)
	subendocardial fibrosis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

{Digestive system}

stomach			<14>				<13>				< 5>				<10>			
	erosion:forestomach		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 5

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	14				13				5				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Digestive system)																		
stomach																		
			<14>				<13>				< 5>				<10>			
	ulcer:forestomach		1 (7)	0 (0)	0 (0)	0 (0)	3 (23)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:forestomach		0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	erosion:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	2 (15)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	ulcer:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
liver																		
			<14>				<13>				< 5>				<10>			
	herniation		1 (7)	0 (0)	0 (0)	0 (0)	2 (15)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
	necrosis:central		0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:focal		0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory cell nest		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	1 (10)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study Grade	Control 14				2500ppm 13				5000ppm 5				10000ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<14>				<13>				< 5>				<10>			
	clear cell focus		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spongiosis hepatis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bile duct hyperplasia		2	12	0	0	2	10	0	0	0	5	0	0	5	4	0	0
			(14)	(86)	(0)	(0)	(15)	(77)	(0)	(0)	(0)	(100)	(0)	(0)	(50)	(40)	(0)	(0)
	focal fatty change		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas			<14>				<13>				< 5>				<10>			
	atrophy		2	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(14)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	arteritis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<14>				<13>				< 5>				<10>			
	scar		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade	Control 14				2500ppm 13				5000ppm 5				10000ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<14>				<13>				< 5>				<10>			
	chronic nephropathy		6 (43)	3 (21)	1 (7)	0 (0)	3 (23)	5 (38)	0 (0)	1 (8)	1 (20)	2 (40)	1 (20)	0 (0)	3 (30)	4 (40)	0 (0)	0 (0)
	tubular necrosis		0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	papillary necrosis		0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	1 (10)	0 (0)	0 (0)
	mineralization:papilla		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (40)	0 (0)	0 (0)	0 * (0)
	mineralization:cortex		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
urin bladd	urothelial hyperplasia:pelvis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
	inflammation		<14>				<13>				< 5>				<10>			
			0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
{Endocrine system}																		
pituitary			<14>				<13>				< 5>				<10>			
	angiectasis		0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade	Control 14				2500ppm 13				5000ppm 5				10000ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<14>				<13>				< 5>				<10>			
	hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	Rathke pouch		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<14>				<13>				< 5>				<10>			
	C-cell hyperplasia		1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(7)	(7)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<14>				<13>				< 5>				<10>			
	hyperplasia:medulla		0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)
{Reproductive system}																		
testis			<14>				<13>				< 5>				<10>			
	atrophy		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(7)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
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STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade	Control 14				2500ppm 13				5000ppm 5				10000ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis			<14>				<13>				< 5>				<10>			
	interstitial cell hyperplasia		4	0	0	0	1	0	0	0	2	1	0	0	3	1	0	0
			(29)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(40)	(20)	(0)	(0)	(30)	(10)	(0)	(0)
prostate			<14>				<13>				< 5>				<10>			
	inflammation		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
mammary gl			<14>				<13>				< 5>				<10>			
	galactoceles		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<14>				<13>				< 5>				<10>			
	cataract		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	retinal atrophy		0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(7)	(0)	(0)	(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 10

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	14				13				5				10			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye			<14>				<13>				< 5>				<10>			
	keratitis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage:cornea		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl			<14>				<13>				< 5>				<10>			
	degeneration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Body cavities}																		
peritoneum			<14>				<13>				< 5>				<10>			
	arteritis		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

(IPT150)

BAIS4

APPENDIX M 3

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
SACRIFICED ANIMALS

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	36				37				45				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<36>				<37>				<45>				<40>			
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	epidermal cyst		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																		
nasal cavit			<36>				<37>				<44>				<40>			
	mineralization		6	0	0	0	7	0	0	0	8	0	0	0	12	0	0	0
			(17)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	hyper plasia:cartilage		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		15	16	0	0	17	14	0	0	12	24	0	0	15	20	1	0
			(42)	(44)	(0)	(0)	(46)	(38)	(0)	(0)	(27)	(55)	(0)	(0)	(38)	(50)	(3)	(0)
	eosinophilic change:respiratory epithelium		7	0	0	0	0	0	0	0 *	2	0	0	0	4	0	0	0
			(19)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	inflammation:foreign body		10	2	0	0	8	4	0	0	13	6	0	0	5	4	0	0
			(28)	(6)	(0)	(0)	(22)	(11)	(0)	(0)	(30)	(14)	(0)	(0)	(13)	(10)	(0)	(0)
Grade	1 : Slight 2 : Moderate 3 : Marked 4 : Severe																	
< a >	a : Number of animals examined at the site																	
b	b : Number of animals with lesion																	
(c)	c : b / a * 100																	
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	36				37				45				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit			<36>				<37>				<44>				<40>			
	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(3)	(0)	(0)	(0)	
	respiratory metaplasia:olfactory epithelium	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
	respiratory metaplasia:gland	9	0	0	0	6	0	0	0	5	0	0	0	6	0	0	0	
		(25)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	
	squamous cell metaplasia:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
lung			<36>				<37>				<45>				<40>			
	inflammatory infiltration	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
	accumulation of foamy cells	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
	bronchiolar-alveolar cell hyperplasia	0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	
		(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	
	inflammation:foreign body	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade				Control 36				2500ppm 37				5000ppm 45				10000ppm 40			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
bone marrow		<36>				<37>				<44>				<40>							
	granulation	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	increased hematopoiesis	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
lymph node		<36>				<37>				<45>				<40>							
	deposit of hemosiderin	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	granulation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	lymphadenitis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
spleen		<36>				<37>				<45>				<40>							
	congestion	5 (14)	1 (3)	0 (0)	0 (0)	6 (16)	0 (0)	0 (0)	0 (0)	7 (16)	0 (0)	0 (0)	0 (0)	7 (18)	0 (0)	0 (0)	0 (0)	7 (18)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin	9 (25)	6 (17)	0 (0)	0 (0)	10 (27)	3 (8)	0 (0)	0 (0)	12 (27)	1 (2)	0 (0)	0 (0)	9 (23)	3 (8)	0 (0)	0 (0)	9 (23)	3 (8)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 4

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	36				37				45				40			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<36>				<37>				<45>				<40>			
	fibrosis:focal		1	1	0	0	0	2	0	0	0	0	0	0	1	1	0	0
			(3)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)
	increased extramedullary hematopoiesis		3	0	1	0	2	0	0	0	6	0	0	0	5	1	0	0
			(8)	(0)	(3)	(0)	(5)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(13)	(3)	(0)	(0)
(Circulatory system)																		
heart			<36>				<37>				<45>				<40>			
	myocardial fibrosis		18	1	0	0	26	3	0	0	26	2	0	0	24	1	0	0
			(50)	(3)	(0)	(0)	(70)	(8)	(0)	(0)	(58)	(4)	(0)	(0)	(60)	(3)	(0)	(0)
(Digestive system)																		
tooth			<36>				<37>				<45>				<40>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
tongue			<36>				<37>				<45>				<40>			
	arteritis		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade				Control 36				2500ppm 37				5000ppm 45				10000ppm 40			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach	epidermal cyst	<36>				<37>				<45>				<40>							
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
small intes	diverticula	<36>				<37>				<45>				<40>							
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	herniation	<36>				<37>				<45>				<40>							
		7	0	0	0	0	0	0	0 *	5	0	0	0	7	0	0	0	7	0	0	0
		(19)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
	thrombus	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 6

Organ	Findings	Control 36				2500ppm 37				5000ppm 45				10000ppm 40			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<36>				<37>				<45>				<40>			
	fatty change	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	6	2	0	0	4	4	0	0	4	2	0	0	4	0	0	0
		(17)	(6)	(0)	(0)	(11)	(11)	(0)	(0)	(9)	(4)	(0)	(0)	(10)	(0)	(0)	(0)
	clear cell focus	3	2	0	0	2	0	0	0	3	1	0	0	1	1	0	0
		(8)	(6)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(2)	(0)	(0)	(3)	(3)	(0)	(0)
	acidophilic cell focus	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	basophilic cell focus	1	0	0	0	3	1	0	0	1	0	0	0	2	0	0	0
		(3)	(0)	(0)	(0)	(8)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	spongiosis hepatitis	3	0	0	0	3	0	0	0	3	0	0	0	1	2	0	0
		(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(5)	(0)	(0)
	bile duct hyperplasia	2	34	0	0	1	36	0	0	3	42	0	0	5	35	0	0
		(6)	(94)	(0)	(0)	(3)	(97)	(0)	(0)	(7)	(93)	(0)	(0)	(13)	(88)	(0)	(0)
	focal fatty change	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105#)

PAGE : 7

Organ	Findings	Control No. of Animals on Study Grade				2500ppm 37				5000ppm 45				10000ppm 40			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
pancreas		<36>				<37>				<45>				<40>			
	atrophy	5	5	0	0	6	9	1	0	9	8	0	0	2	9	0	0
		(14)	(14)	(0)	(0)	(16)	(24)	(3)	(0)	(20)	(18)	(0)	(0)	(5)	(23)	(0)	(0)
{Urinary system}																	
kidney		<36>				<37>				<45>				<40>			
	scar	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	7	27	2	0	5	29	3	0	7	33	4	0	9	29	2	0
		(19)	(75)	(6)	(0)	(14)	(78)	(8)	(0)	(16)	(73)	(9)	(0)	(23)	(73)	(5)	(0)
	papillary necrosis	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	mineralization:papilla	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	mineralization:pelvis	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	urothelial hyperplasia:pelvis	1	0	0	0	1	0	0	0	1	0	0	0	3	3	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(8)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade	Control 36				2500ppm 37				5000ppm 45				10000ppm 40			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<36>				<37>				<45>				<40>			
	angiectasis		1	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	cyst		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		6	3	0	0	4	0	0	0	8	4	0	0	3	4	0	0
			(17)	(8)	(0)	(0)	(11)	(0)	(0)	(0)	(18)	(9)	(0)	(0)	(8)	(10)	(0)	(0)
	Rathke pouch		2	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0
			(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
thyroid			<36>				<37>				<45>				<40>			
	follicular hyperplasia		0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	C-cell hyperplasia		5	5	0	0	9	4	0	0	9	5	0	0	3	2	0	0
			(14)	(14)	(0)	(0)	(24)	(11)	(0)	(0)	(20)	(11)	(0)	(0)	(8)	(5)	(0)	(0)
adrenal			<36>				<37>				<45>				<40>			
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 9

Organ_____	Findings_____	Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	36				37				45				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<36>				<37>				<45>				<40>			
	hyperplasia:medulla		3	1	0	0	2	0	0	0	1	2	0	0	2	1	0	0
		(8)	(3)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(5)	(3)	(0)	(0)	
	focal fatty change:cortex		0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
{Reproductive system}																		
testis			<36>				<37>				<45>				<40>			
	atrophy		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	mineralization		0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
	arteritis		0	4	0	0	3	2	0	0	4	2	0	0	4	1	0	0
		(0)	(11)	(0)	(0)	(8)	(5)	(0)	(0)	(9)	(4)	(0)	(0)	(10)	(3)	(0)	(0)	
	interstitial cell hyperplasia		13	1	0	0	13	0	0	0	14	1	0	0	13	2	0	0
		(36)	(3)	(0)	(0)	(35)	(0)	(0)	(0)	(31)	(2)	(0)	(0)	(33)	(5)	(0)	(0)	
prostate			<36>				<37>				<45>				<40>			
	inflammation		0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(3)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 36				2500ppm 37				5000ppm 45				10000ppm 40			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
prostate	hyperplasia		<36>				<37>				<45>				<40>			
			4	1	0	0	8	3	0	0	8	1	0	0	4	2	0	0
			(11)	(3)	(0)	(0)	(22)	(8)	(0)	(0)	(18)	(2)	(0)	(0)	(10)	(5)	(0)	(0)
{Nervous system}																		
brain	inflammation		<36>				<37>				<45>				<40>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye	cataract		<36>				<37>				<45>				<40>			
			5	1	0	0	4	0	0	0	4	0	0	0	0	0	0	0 *
			(14)	(3)	(0)	(0)	(11)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		12	13	0	0	11	5	0	0 *	10	7	0	0 *	21	4	0	0 *
			(33)	(36)	(0)	(0)	(30)	(14)	(0)	(0)	(22)	(16)	(0)	(0)	(53)	(10)	(0)	(0)
{Musculoskeletal system}																		
bone	osteosis		<36>				<37>				<44>				<40>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

APPENDIX M 4

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
ALL ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 15

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
<hr/>																		
{Integumentary system/appondage}																		
skin/app			<50>				<50>				<50>				<50>			
	inflammation		1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
			(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	scab		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	epidermal cyst		0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	
			(0)	(4)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
<hr/>																		
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	thrombus		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		2	0	0	0	3	0	0	0	2	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		6	36	4	0	2	41	5	0	6	41	2	0	2	40	6	0
			(12)	(72)	(8)	(0)	(4)	(82)	(10)	(0)	(12)	(82)	(4)	(0)	(4)	(80)	(12)	(0)
	eosinophilic change:respiratory epithelium		18	0	0	0	15	0	0	0	17	0	0	0	17	0	0	0
			(36)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(34)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study				Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																					
nasal cavit		<50>				<50>				<50>				<50>				<50>			
	inflammation:foreign body	5	0	0	0	4	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
		(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	inflammation:respiratory epithelium	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	respiratory metaplasia:gland	5	0	0	0	7	0	0	0	9	0	0	0	10	0	0	0	10	0	0	0
		(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
larynx		<50>				<50>				<50>				<50>				<50>			
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung		<50>				<50>				<50>				<50>				<50>			
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	accumulation of foamy cells	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<50>			
	bronchiolar-alveolar cell hyperplasia		3	0	0	0	0	0	0	0	2	1	0	0	4	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(8)	(0)	(0)	(0)
	inflammation:foreign body		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulomatous pneumonia		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	granulation		4	2	0	0	3	1	0	0	5	0	0	0	4	2	0	0
			(8)	(4)	(0)	(0)	(6)	(2)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(4)	(0)	(0)
	increased hematopoiesis		6	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(12)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	granulopoiesis:increased		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<50>				<50>				<50>				<50>			
	congestion		4	0	0	0	3	0	0	0	3	1	0	0	3	1	0	0
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 18

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<50>				<50>				<50>				<50>			
	deposit of hemosiderin		15	21	0	0	14	21	0	0	12	20	0	0	14	25	0	0
			(30)	(42)	(0)	(0)	(28)	(42)	(0)	(0)	(24)	(40)	(0)	(0)	(28)	(50)	(0)	(0)
	increased extramedullary hematopoiesis		5	4	2	0	7	3	0	0	7	4	0	0	3	1	0	0
			(10)	(8)	(4)	(0)	(14)	(6)	(0)	(0)	(14)	(8)	(0)	(0)	(6)	(2)	(0)	(0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	inflammatory cell nest		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		11	0	0	0	11	0	0	0	8	0	0	0	7	1	0	0
			(22)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(14)	(2)	(0)	(0)
	subendocardial fibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	mineralization		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
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STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 19

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
<hr/>																		
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	ulcer:forestomach		1 (2)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	4 (8)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	hyperplasia:forestomach		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	erosion:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	ulcer:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
liver			<50>				<50>				<50>				<50>			
	herniation		12 (24)	0 (0)	0 (0)	0 (0)	11 (22)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)
	peliosis-like lesion		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:central		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	necrosis:focal		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study				Control				2500ppm				5000ppm				10000ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<50>				<50>				<50>				<50>				<50>			
	fatty change:central	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
	fatty change:peripheral	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration	0	1	0	0	2	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0
		(0)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	15	3	4	0	15	6	3	0	11	5	2	0	10	3	2	0	10	3	2	0
		(30)	(6)	(8)	(0)	(30)	(12)	(6)	(0)	(22)	(10)	(4)	(0)	(20)	(6)	(4)	(0)	(20)	(6)	(4)	(0)
	inflammatory cell nest	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus	15	6	0	0	14	4	0	0	8	4	0	0	8	5	0	0	8	5	0	0
		(30)	(12)	(0)	(0)	(28)	(8)	(0)	(0)	(16)	(8)	(0)	(0)	(16)	(10)	(0)	(0)	(16)	(10)	(0)	(0)
	bile duct hyperplasia	12	1	0	0	14	3	0	0	18	1	1	0	15	3	0	0	15	3	0	0
		(24)	(2)	(0)	(0)	(28)	(6)	(0)	(0)	(36)	(2)	(2)	(0)	(30)	(6)	(0)	(0)	(30)	(6)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
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 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study				Control				2500ppm				5000ppm				10000ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<50>				<50>				<50>				<50>				<50>			
	bile ductular proliferation	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas		<50>				<50>				<50>				<50>				<50>			
	atrophy	4	1	0	0	3	4	0	0	2	0	0	0	4	2	0	0	4	2	0	0
		(8)	(2)	(0)	(0)	(6)	(8)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(4)	(0)	(0)	(8)	(4)	(0)	(0)
	islet cell hyperplasia	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																					
kidney		<50>				<50>				<50>				<50>				<50>			
	deposit of hemosiderin	0	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	inflammatory cell nest	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scar	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
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 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				2500ppm 50				5000ppm 50				10000ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	chronic nephropathy		20	10	0	0	19	9	0	0	13	11	1	0	21	7	1	0
			(40)	(20)	(0)	(0)	(38)	(18)	(0)	(0)	(26)	(22)	(2)	(0)	(42)	(14)	(2)	(0)
	papillary necrosis		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	mineralization:cortico-medullary junction		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:papilla		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	atypical tubule hyperplasia		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis		3	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
urin bladd			<50>				<50>				<50>				<50>			
	nodular hyperplasia:transitional epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		3	1	0	0	3	1	0	0	3	0	0	0	6	1	0	0
			(6)	(2)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(12)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary	cyst		<50>				<50>				<50>				<50>			
			1	1	0	0	1	0	0	0	3	0	0	0	3	0	0	0
			(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	hyperplasia		7	2	0	0	7	4	0	0	9	4	0	0	9	2	0	0
			(14)	(4)	(0)	(0)	(14)	(8)	(0)	(0)	(18)	(8)	(0)	(0)	(18)	(4)	(0)	(0)
	Rathke pouch		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid	C-cell hyperplasia		<50>				<50>				<50>				<50>			
			5	3	0	0	8	3	0	0	3	2	0	0	5	6	0	0
			(10)	(6)	(0)	(0)	(16)	(6)	(0)	(0)	(6)	(4)	(0)	(0)	(10)	(12)	(0)	(0)
adrenal	peliosis-like lesion		<50>				<50>				<50>				<50>			
			2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	hyperplasia:cortical cell		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia:medulla		1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
			(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
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 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study Grade	Control				2500ppm				5000ppm				10000ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal	focal fatty change:cortex		<50>				<50>				<50>				<50>			
			1	1	0	0	5	1	0	0	2	0	0	0	5	0	0	0
			(2)	(2)	(0)	(0)	(10)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
{Reproductive system}																		
ovary	hemorrhage		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
uterus	cystic endometrial hyperplasia		<50>				<50>				<50>				<50>			
			2	2	0	0	1	1	0	0	0	1	0	0	2	3	0	0
			(4)	(4)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(6)	(0)	(0)
mammary gl	galactoceles		<50>				<50>				<50>				<50>			
			0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain	gliosis		<50>				<50>				<50>				<50>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study				Control				2500ppm				5000ppm				10000ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																					
eye		<50>				<50>				<50>				<50>				<50>			
	cataract	2	0	0	0	3	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0
		(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	retinal atrophy	16	10	0	0	22	8	0	0	14	12	0	0	19	15	0	0	38	30	0	0
		(32)	(20)	(0)	(0)	(44)	(16)	(0)	(0)	(28)	(24)	(0)	(0)	(38)	(30)	(0)	(0)	(38)	(30)	(0)	(0)
	keratitis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	vascularization:cornea	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasolacr d		<50>				<50>				<50>				<50>				<50>			
	inflammation	0	6	0	0	0	2	0	0	1	2	0	0	0	1	0	0	0	2	0	0
		(0)	(12)	(0)	(0)	(0)	(4)	(0)	(0)	(2)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
{Musculoskeletal system}																					
muscle		<50>				<50>				<50>				<50>				<50>			
	mineralization	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 26

Organ_____	Findings_____	Group Name				Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study				50				50				50				50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			

{Musculoskeletal system}

bone	osteosclerosis	<50>				<50>				<50>				<50>			
		5	0	0	0	9	0	0	0	4	0	0	0	4	0	0	0
		(10)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)

{Body cavities}

adipose	hemorrhage	<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

(HPT150)

BATS4

APPENDIX M 5

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 11

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	11				10				12				9			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<11>				<10>				<12>				< 9>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	epidermal cyst		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																		
nasal cavit			<11>				<10>				<12>				< 9>			
	thrombus		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		4	4	0	0	0	8	0	0	2	10	0	0 *	1	6	0	0
			(36)	(36)	(0)	(0)	(0)	(80)	(0)	(0)	(17)	(83)	(0)	(0)	(11)	(67)	(0)	(0)
	eosinophilic change:respiratory epithelium		1	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0
			(9)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	inflammation:foreign body		1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
			(9)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Grade	1 : Slight 2 : Moderate 3 : Marked 4 : Severe																	
< a >	a : Number of animals examined at the site																	
b	b : Number of animals with lesion																	
(c)	c : b / a * 100																	
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 12

Organ	Findings	Control No. of Animals on Study Grade				2500ppm 10				5000ppm 12				10000ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit	respiratory metaplasia:gland	<11>				<10>				<12>				< 9>			
		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
larynx	inflammatory infiltration	<11>				<10>				<12>				< 9>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung	inflammatory infiltration	<11>				<10>				<12>				< 9>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation:foreign body	<11>				<10>				<12>				< 9>			
		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																	
bone marrow	granulation	<11>				<10>				<12>				< 9>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	increased hematopoiesis	<11>				<10>				<12>				< 9>			
		3	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0
		(27)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade	Control 11				2500ppm 10				5000ppm 12				10000ppm 9			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<11>				<10>				<12>				< 9>			
	congestion		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)
	deposit of hemosiderin		2	4	0	0	0	3	0	0	3	3	0	0	5	0	0	0
			(18)	(36)	(0)	(0)	(0)	(30)	(0)	(0)	(25)	(25)	(0)	(0)	(56)	(0)	(0)	(0)
	increased extramedullary hematopoiesis		1	2	0	0	1	2	0	0	1	3	0	0	1	1	0	0
			(9)	(18)	(0)	(0)	(10)	(20)	(0)	(0)	(8)	(25)	(0)	(0)	(11)	(11)	(0)	(0)
{Circulatory system}																		
heart			<11>				<10>				<12>				< 9>			
	thrombus		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(11)	(0)	(0)
	inflammatory cell nest		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		3	0	0	0	4	0	0	0	3	0	0	0	1	1	0	0
			(27)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(11)	(11)	(0)	(0)
	subendocardial fibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	Control 11				2500ppm 10				5000ppm 12				10000ppm 9			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach	mineralization		<11>				<10>				<12>				< 9>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		0	0	0	0	3	0	0	0	3	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(25)	(8)	(0)	(0)	(11)	(0)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	herniation		<11>				<10>				<12>				< 9>			
			3	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(27)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	necrosis:central		1	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0
			(9)	(0)	(0)	(0)	(0)	(10)	(10)	(0)	(8)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 15

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control 11				2500ppm 10				5000ppm 12				10000ppm 9			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<11>				<10>				<12>				< 9>			
	fatty change:central		0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)
	fatty change:peripheral		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
		(18)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	inflammatory cell nest		1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	bile duct hyperplasia		0	1	0	0	4	2	0	0 *	3	0	0	0	3	0	0	0
			(0)	(9)	(0)	(0)	(40)	(20)	(0)	(0)	(25)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
pancreas			<11>				<10>				<12>				< 9>			
	atrophy		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	islet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade				Control 11				2500ppm 10				5000ppm 12				10000ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
kidney		<11>				<10>				<12>				< 9>							
	deposit of hemosiderin	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	1	1	0	0	1	1	0	0	3	1	1	0	0	2	1	0	0	0	0	0
		(9)	(9)	(0)	(0)	(10)	(10)	(0)	(0)	(25)	(8)	(8)	(0)	(0)	(22)	(11)	(0)	(0)	(0)	(0)	(0)
	papillary necrosis	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:papilla	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis	2	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0
		(18)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(11)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																					
pituitary		<11>				<10>				<12>				< 9>							
	angiectasis	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 17

		Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	11				10				12				9			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<11>				<10>				<12>				< 9>			
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	hyperplasia		1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(9)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<11>				<10>				<12>				< 9>			
	C-cell hyperplasia		0	1	0	0	3	0	0	0	0	0	0	0	1	2	0	0
			(0)	(9)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(22)	(0)	(0)
adrenal			<11>				<10>				<12>				< 9>			
	peliosis-like lesion		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	hyperplasia:medulla		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex		0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
{Reproductive system}																		
uterus			<11>				<10>				<12>				< 9>			
	cystic endometrial hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 18

Organ	Findings	Group Name No. of Animals on Study Grade	Control 11				2500ppm 10				5000ppm 12				10000ppm 9			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
mammary gl	galactoceles		<11>				<10>				<12>				< 9>			
			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye	cataract		<11>				<10>				<12>				< 9>			
			0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	retinal atrophy		<11>				<10>				<12>				< 9>			
			0	0	0	0	1	1	0	0	1	1	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(10)	(10)	(0)	(0)	(8)	(8)	(0)	(0)	(22)	(11)	(0)	(0)
	keratitis		<11>				<10>				<12>				< 9>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	vascularization:cornea		<11>				<10>				<12>				< 9>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasolacr d	inflammation		<11>				<10>				<12>				< 9>			
			0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0
			(0)	(9)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study				Control				2500ppm				5000ppm				10000ppm			
		Grade				11				10				12				9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Musculoskeletal system)																					
muscle	mineralization	<11>				<10>				<12>				< 9>							
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
bone	osteosclerosis	<11>				<10>				<12>				< 9>							
		1	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		(9)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

(IPT150)

BAIS4

APPENDIX M 6

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105#)

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade				Control 39				2500ppm 40				5000ppm 38				10000ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<39>				<40>				<38>				<41>							
	inflammation	1 (3)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	scab	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	epidermal cyst	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Respiratory system}																					
nasal cavit		<39>				<40>				<38>				<41>							
	mineralization	2 (5)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium	2 (5)	32 (82)	4 (10)	0 (0)	2 (5)	33 (83)	5 (13)	0 (0)	4 (11)	31 (82)	2 (5)	0 (0)	1 (2)	34 (83)	6 (15)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium	17 (44)	0 (0)	0 (0)	0 (0)	14 (35)	0 (0)	0 (0)	0 (0)	14 (37)	0 (0)	0 (0)	0 (0)	16 (39)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammation:foreign body	4 (10)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	3 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Grade	1 : Slight 2 : Moderate 3 : Marked 4 : Severe																				
< a >	a : Number of animals examined at the site																				
b	b : Number of animals with lesion																				
(c)	c : b / a * 100																				
Significant difference ;	* : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																				

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 12

		Group Name No. of Animals on Study				Control 39				2500ppm 40				5000ppm 38				10000ppm 41			
Organ	Findings	Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<39>				<40>				<38>				<41>							
	inflammation:respiratory epithelium	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:gland	5 (13)	0 (0)	0 (0)	0 (0)	7 (18)	0 (0)	0 (0)	0 (0)	8 (21)	0 (0)	0 (0)	0 (0)	9 (22)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
lung		<39>				<40>				<38>				<41>							
	fibrosis:focal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	accumulation of foamy cells	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia	3 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	1 (3)	0 (0)	0 (0)	4 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	granulomatous pneumonia	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Hematopoietic system}																					
bone marrow		<39>				<40>				<38>				<41>							
	granulation	3 (8)	2 (5)	0 (0)	0 (0)	3 (8)	1 (3)	0 (0)	0 (0)	5 (13)	0 (0)	0 (0)	0 (0)	4 (10)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Grade	1 : Slight 2 : Moderate 3 : Marked 4 : Severe																				
< a >	a : Number of animals examined at the site																				
b	b : Number of animals with lesion																				
(c)	c : b / a * 100																				
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																					

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study				Control 39				2500ppm 40				5000ppm 38				10000ppm 41			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
bone marrow		<39>				<40>				<38>				<41>							
	increased hematopoiesis	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulopoiesis:increased	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen		<39>				<40>				<38>				<41>							
	congestion	3	0	0	0	3	0	0	0	3	1	0	0	3	0	0	0	3	0	0	0
		(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(3)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	deposit of hemosiderin	13	17	0	0	14	18	0	0	9	17	0	0	9	25	0	0	22	61	0	0
		(33)	(44)	(0)	(0)	(35)	(45)	(0)	(0)	(24)	(45)	(0)	(0)	(22)	(61)	(0)	(0)	(22)	(61)	(0)	(0)
	increased extramedullary hematopoiesis	4	2	2	0	6	1	0	0	6	1	0	0	2	0	0	0	5	0	0	0
		(10)	(5)	(5)	(0)	(15)	(3)	(0)	(0)	(16)	(3)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
{Circulatory system}																					
heart		<39>				<40>				<38>				<41>							
	thrombus	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 14

Organ	Findings	Control No. of Animals on Study Grade				2500ppm 40				5000ppm 38				10000ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																	
heart	myocardial fibrosis	<39>				<40>				<38>				<41>			
		8	0	0	0	7	0	0	0	5	0	0	0	6	0	0	0
		(21)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(15)	(0)	(0)	(0)
(Digestive system)																	
stomach	ulcer:forestomach	<39>				<40>				<38>				<41>			
		1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	<39>				<40>				<38>				<41>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	herniation	<39>				<40>				<38>				<41>			
		9	0	0	0	9	0	0	0	6	0	0	0	9	0	0	0
		(23)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	peliosis-like lesion	<39>				<40>				<38>				<41>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	<39>				<40>				<38>				<41>			
		0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(3)	(3)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 15

Organ	Findings	Control No. of Animals on Study Grade				2500ppm 40				5000ppm 38				10000ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<39>				<40>				<38>				<41>			
	lymphocytic infiltration	0	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(5)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	13	3	4	0	13	6	3	0	9	5	2	0	10	3	2	0
		(33)	(8)	(10)	(0)	(33)	(15)	(8)	(0)	(24)	(13)	(5)	(0)	(24)	(7)	(5)	(0)
	inflammatory cell nest	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas	clear cell focus	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus	14	6	0	0	14	4	0	0	8	4	0	0	7	5	0	0
		(36)	(15)	(0)	(0)	(35)	(10)	(0)	(0)	(21)	(11)	(0)	(0)	(17)	(12)	(0)	(0)
	bile duct hyperplasia	12	0	0	0	10	1	0	0	15	1	1	0	12	3	0	0
		(31)	(0)	(0)	(0)	(25)	(3)	(0)	(0)	(39)	(3)	(3)	(0)	(29)	(7)	(0)	(0)
	bile ductular proliferation	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas		<39>				<40>				<38>				<41>			
	atrophy	4	1	0	0	3	3	0	0	2	0	0	0	4	2	0	0
		(10)	(3)	(0)	(0)	(8)	(8)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(5)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade				Control 39				2500ppm 40				5000ppm 38				10000ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																					
kidney		<39>				<40>				<38>				<41>							
	deposit of hemosiderin	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scar	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	19	9	0	0	18	8	0	0	10	10	0	0	21	5	0	0				
		(49)	(23)	(0)	(0)	(45)	(20)	(0)	(0)	(26)	(26)	(0)	(0)	(51)	(12)	(0)	(0)				
	mineralization:cortico-medullary junction	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	atypical tubule hyperplasia	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
urin bladd		<39>				<40>				<38>				<41>							
	nodular hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)				
(Endocrine system)																					
pituitary		<39>				<40>				<38>				<41>							
	angiectasis	3	1	0	0	1	1	0	0	3	0	0	0	6	1	0	0				
		(8)	(3)	(0)	(0)	(3)	(3)	(0)	(0)	(8)	(0)	(0)	(0)	(15)	(2)	(0)	(0)				

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control 39				2500ppm 40				5000ppm 38				10000ppm 41			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary			<39>				<40>				<38>				<41>			
	cyst		1	1	0	0	1	0	0	0	3	0	0	0	2	0	0	0
			(3)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	hyperplasia		6	2	0	0	7	3	0	0	8	4	0	0	9	2	0	0
			(15)	(5)	(0)	(0)	(18)	(8)	(0)	(0)	(21)	(11)	(0)	(0)	(22)	(5)	(0)	(0)
	Rathke pouch		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<39>				<40>				<38>				<41>			
	C-cell hyperplasia		5	2	0	0	5	3	0	0	3	2	0	0	4	4	0	0
			(13)	(5)	(0)	(0)	(13)	(8)	(0)	(0)	(8)	(5)	(0)	(0)	(10)	(10)	(0)	(0)
adrenal			<39>				<40>				<38>				<41>			
	peliosis-like lesion		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia:cortical cell		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia:medulla		0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 18

Organ_____	Findings_____	Group Name	Control				2500ppm				5000ppm				10000ppm			
		No. of Animals on Study	39				40				38				41			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<39>				<40>				<38>				<41>			
	focal fatty change:cortex		1	1	0	0	5	1	0	0	0	0	0	0	4	0	0	0
			(3)	(3)	(0)	(0)	(13)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<39>				<40>				<38>				<41>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	
uterus			<39>				<40>				<38>				<41>			
	cystic endometrial hyperplasia		2	2	0	0	0	1	0	0	0	1	0	0	2	2	0	0
			(5)	(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(5)	(5)	(0)	(0)
mammary gl			<39>				<40>				<38>				<41>			
	galactoceles		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	
{Nervous system}																		
brain			<39>				<40>				<38>				<41>			
	gliosis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 19

Organ	Findings	Control No. of Animals on Study Grade				2500ppm 40				5000ppm 38				10000ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																	
eye	cataract	<39>				<40>				<38>				<41>			
		2	0	0	0	3	0	0	0	4	0	0	0	2	0	0	0
		(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	retinal atrophy	16	10	0	0	21	7	0	0	13	11	0	0	17	14	0	0
		(41)	(26)	(0)	(0)	(53)	(18)	(0)	(0)	(34)	(29)	(0)	(0)	(41)	(34)	(0)	(0)
nasolacr d	inflammation	<39>				<40>				<38>				<41>			
		0	5	0	0	0	1	0	0	1	1	0	0	0	1	0	0
		(0)	(13)	(0)	(0)	(0)	(3)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(2)	(0)	(0)
{Musculoskeletal system}																	
bone	osteosclerosis	<39>				<40>				<38>				<41>			
		4	0	0	0	8	0	0	0	2	0	0	0	3	0	0	0
		(10)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
{Body cavities}																	
adipose	hemorrhage	<39>				<40>				<38>				<41>			
		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

APPENDIX N 1

NUMBER OF ANIMALS WITH TUMORS
AND NUMBER OF TUMORS-TIME RELATED : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 1

Time-related Weeks	Items	Group Name	Control	2500ppm	5000ppm	10000ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	0
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		1	3	1	1
	NO. OF ANIMALS WITH TUMORS		1	2	1	1
	NO. OF ANIMALS WITH SINGLE TUMORS		1	2	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	1
	NO. OF BENIGN TUMORS		0	0	1	1
	NO. OF MALIGNANT TUMORS		1	2	0	1
	NO. OF TOTAL TUMORS		1	2	1	2
79 - 104	NO. OF EXAMINED ANIMALS		13	10	4	9
	NO. OF ANIMALS WITH TUMORS		13	10	4	8
	NO. OF ANIMALS WITH SINGLE TUMORS		7	4	2	4
	NO. OF ANIMALS WITH MULTIPLE TUMORS		6	6	2	4
	NO. OF BENIGN TUMORS		16	17	3	11
	NO. OF MALIGNANT TUMORS		5	8	4	3
	NO. OF TOTAL TUMORS		21	25	7	14
105 - 105	NO. OF EXAMINED ANIMALS		36	37	45	40
	NO. OF ANIMALS WITH TUMORS		34	37	45	39
	NO. OF ANIMALS WITH SINGLE TUMORS		15	10	9	13
	NO. OF ANIMALS WITH MULTIPLE TUMORS		19	27	36	26
	NO. OF BENIGN TUMORS		60	70	83	62
	NO. OF MALIGNANT TUMORS		5	13	11	13
	NO. OF TOTAL TUMORS		65	83	94	75

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 2

Time-related Weeks	Items	Group Name	Control	2500ppm	5000ppm	10000ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		48	49	50	48
	NO. OF ANIMALS WITH SINGLE TUMORS		23	16	12	17
	NO. OF ANIMALS WITH MULTIPLE TUMORS		25	33	38	31
	NO. OF BENIGN TUMORS		76	87	87	74
	NO. OF MALIGNANT TUMORS		11	23	15	17
	NO. OF TOTAL TUMORS		87	110	102	91

(HPT070)

BAIS4

APPENDIX N 2

NUMBER OF ANIMALS WITH TUMORS
AND NUMBER OF TUMORS-TIME RELATED : FEMALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 3

Time-related Weeks	Items	Group Name	Control	2500ppm	5000ppm	10000ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	0	0	0
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		4	2	1	0
	NO. OF ANIMALS WITH TUMORS		3	2	1	0
	NO. OF ANIMALS WITH SINGLE TUMORS		3	2	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	1	0
	NO. OF BENIGN TUMORS		0	0	2	0
	NO. OF MALIGNANT TUMORS		3	2	0	0
	NO. OF TOTAL TUMORS		3	2	2	0
79 - 104	NO. OF EXAMINED ANIMALS		6	8	11	9
	NO. OF ANIMALS WITH TUMORS		6	8	11	6
	NO. OF ANIMALS WITH SINGLE TUMORS		6	6	7	3
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	2	4	3
	NO. OF BENIGN TUMORS		2	4	9	8
	NO. OF MALIGNANT TUMORS		4	6	8	3
	NO. OF TOTAL TUMORS		6	10	17	11
105 - 105	NO. OF EXAMINED ANIMALS		39	40	38	41
	NO. OF ANIMALS WITH TUMORS		23	29	27	22
	NO. OF ANIMALS WITH SINGLE TUMORS		14	16	16	16
	NO. OF ANIMALS WITH MULTIPLE TUMORS		9	13	11	6
	NO. OF BENIGN TUMORS		27	34	30	20
	NO. OF MALIGNANT TUMORS		8	10	12	8
	NO. OF TOTAL TUMORS		35	44	42	28

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 4

Time-related Weeks	Items	Group Name	Control	2500ppm	5000ppm	10000ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		32	39	39	28
	NO. OF ANIMALS WITH SINGLE TUMORS		23	24	23	19
	NO. OF ANIMALS WITH MULTIPLE TUMORS		9	15	16	9
	NO. OF BENIGN TUMORS		29	38	41	28
	NO. OF MALIGNANT TUMORS		15	18	20	11
	NO. OF TOTAL TUMORS		44	56	61	39

(HPT070)

BAIS4

APPENDIX O 1

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
	trichoepithelioma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	keratoacanthoma		1 (2%)	0 (0%)	4 (8%)	0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		4 (8%)	3 (6%)	1 (2%)	3 (6%)
	lipoma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
	schwannoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	schwannoma:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Respiratory system}						
nasal cavit			<50>	<50>	<49>	<50>
	chondroma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		2 (4%)	2 (4%)	3 (6%)	0 (0%)
{Hematopoietic system}						
bone marrow			<50>	<50>	<49>	<50>
	xanthoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BAIS4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Hematopoietic system}						
lymph node	masteytoma:malignant		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
thymus	thymoma:malignant		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
spleen	mononuclear cell leukemia		<50> 6 (12%)	<50> 9 (18%)	<50> 8 (16%)	<50> 10 (20%)
	hemangiosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Digestive system}						
oral cavity	squamous cell papilloma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
	squamous cell carcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
tooth	ameloblastoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
small intes	leiomyoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	leiomyosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
liver	hepatocellular adenoma		<50> 2 (4%)	<50> 2 (4%)	<50> 0 (0%)	<50> 3 (6%)
	hemangiosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	hepatocellular carcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Digestive system}						
pancreas	islet cell adenoma		<50> 3 (6%)	<50> 1 (2%)	<50> 2 (4%)	<50> 3 (6%)
{Urinary system}						
kidney	renal cell carcinoma		<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	nephroblastoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
urin bladd	transitional cell papilloma		<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
{Endocrine system}						
pituitary	adenoma		<50> 15 (30%)	<50> 21 (42%)	<50> 15 (30%)	<50> 12 (24%)
thyroid	C-cell adenoma		<50> 7 (14%)	<50> 6 (12%)	<50> 9 (18%)	<50> 10 (20%)
	follicular adenoma		0 (0%)	1 (2%)	1 (2%)	0 (0%)
	C-cell carcinoma		0 (0%)	1 (2%)	1 (2%)	1 (2%)
adrenal	pheochromocytoma		<50> 1 (2%)	<50> 4 (8%)	<50> 4 (8%)	<50> 1 (2%)
	pheochromocytoma:malignant		0 (0%)	2 (4%)	3 (6%)	1 (2%)
{Reproductive system}						
testis	interstitial cell tumor		<50> 35 (70%)	<50> 39 (78%)	<50> 40 (80%)	<50> 40 (80%)
< a > a : Number of animals examined at the site b (c) b : Number of animals with neoplasm c : b / a * 100						
(HPT085)						BAIS4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Reproductive system}						
mammary gl	adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	fibroadenoma		0 (0%)	1 (2%)	2 (4%)	0 (0%)
prep/cli gl	adenoma		<50> 2 (4%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
{Nervous system}						
brain	glioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Special sense organs/appendage}						
Zymbal gl	Zymbal gland tumor:benign		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	Zymbal gland tumor:malignant		1 (2%)	1 (2%)	0 (0%)	0 (0%)
{Musculoskeletal system}						
bone	osteosarcoma		<50> 0 (0%)	<50> 1 (2%)	<49> 0 (0%)	<50> 1 (2%)
{Body cavities}						
peritoneum	mesothelioma		<50> 0 (0%)	<50> 1 (2%)	<50> 2 (4%)	<50> 2 (4%)
retroperit	neuroendocrine cell tumor:malignant		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

APPENDIX O 2

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : FEMALE

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Integumentary system/appandage}						
skin/app	squamous cell papilloma		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
	squamous cell carcinoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
subcutis	fibroma		<50> 1 (2%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	fibrosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Respiratory system}						
lung	bronchiolar-alveolar adenoma		<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)	<50> 0 (0%)
{Hematopoietic system}						
bone marrow	histiocytic sarcoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
spleen	mononuclear cell leukemia		<50> 5 (10%)	<50> 11 (22%)	<50> 11 (22%)	<50> 5 (10%)
{Digestive system}						
tongue	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
large intes	lipoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
liver	hepatocellular adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Urinary system}						
urin bladd	transitional cell papilloma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
{Endocrine system}						
pituitary	adenoma		<50> 10 (20%)	<50> 13 (26%)	<50> 12 (24%)	<50> 10 (20%)
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
thyroid	C-cell adenoma		<50> 6 (12%)	<50> 4 (8%)	<50> 4 (8%)	<50> 2 (4%)
	follicular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	C-cell carcinoma		0 (0%)	1 (2%)	1 (2%)	1 (2%)
adrenal	pheochromocytoma		<50> 2 (4%)	<50> 1 (2%)	<50> 3 (6%)	<50> 0 (0%)
	cortical adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	pheochromocytoma:malignant		0 (0%)	1 (2%)	1 (2%)	0 (0%)
{Reproductive system}						
ovary	granular cell tumor:malignant		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
uterus	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BAIS4

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Reproductive system}						
uterus	endometrial stromal polyp		<50> 5 (10%)	<50> 10 (20%)	<50> 11 (22%)	<50> 9 (18%)
	adenocarcinoma		0 (0%)	2 (4%)	0 (0%)	1 (2%)
	endometrial stromal sarcoma		3 (6%)	2 (4%)	4 (8%)	3 (6%)
vagina	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
mammary gl	adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
	fibroadenoma		4 (8%)	2 (4%)	6 (12%)	3 (6%)
prep/cli gl	adenoma		<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
{Nervous system}						
brain	glioma		<50> 2 (4%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
{Special sense organs/appendage}						
Zymbal gl	Zymbal gland tumor:malignant		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Musculoskeletal system}						
muscle	leiomyosarcoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BAIS4

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 8

Organ	Findings	Group Name No. of animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Musculoskeletal system}						
bone			<50>	<50>	<50>	<50>
	osteosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	sarcoma:NOS		0 (0%)	0 (0%)	1 (2%)	0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BAIS4

APPENDIX P 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : MALE

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : skin/appendage TUMOR : keratoacanthoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	4/50(8.0)	0/50(0.0)
Adjusted rates(b)	2.78	0.0	8.89	0.0
Terminal rates(c)	1/36(2.8)	0/37(0.0)	4/45(8.9)	0/40(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.6171			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.8183			
Fisher Exact test(e)		P = 0.5000	P = 0.1811	P = 0.5000
SITE : subcutis TUMOR : fibroma				
Tumor rate				
Overall rates(a)	4/50(8.0)	3/50(6.0)	1/50(2.0)	3/50(6.0)
Adjusted rates(b)	6.98	7.14	2.22	7.50
Terminal rates(c)	2/36(5.6)	1/37(2.7)	1/45(2.2)	3/40(7.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9201 ?			
Prevalence method(d)	P = 0.5858			
Combined analysis(d)	P = 0.7191			
Cochran-Armitage test(e)	P = 0.6370			
Fisher Exact test(e)		P = 0.5000	P = 0.1811	P = 0.5000
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	5.56	5.41	6.67	0.0
Terminal rates(c)	2/36(5.6)	2/37(5.4)	3/45(6.7)	0/40(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8938			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2689			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.2475

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	6/50(12.0)	9/50(18.0)	8/50(16.0)	10/50(20.0)
Adjusted rates(b)	11.11	16.22	17.78	20.00
Terminal rates(c)	4/36(11.1)	6/37(16.2)	8/45(17.8)	8/40(20.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6407			
Prevalence method(d)	P = 0.1612			
Combined analysis(d)	P = 0.2508			
Cochran-Armitage test(e)	P = 0.3504			
Fisher Exact test(e)		P = 0.2883	P = 0.3871	P = 0.2070
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	5.56	5.26	0.0	7.50
Terminal rates(c)	2/36(5.6)	1/37(2.7)	0/45(0.0)	3/40(7.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.3585			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.6489			
Fisher Exact test(e)		P = 0.6913	P = 0.2475	P = 0.5000
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	5.56	7.89	0.0	7.50
Terminal rates(c)	2/36(5.6)	2/37(5.4)	0/45(0.0)	3/40(7.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4421			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.8073			
Fisher Exact test(e)		P = 0.5000	P = 0.2475	P = 0.5000

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr.j]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : pancreas TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	6.25	2.70	4.44	7.50
Terminal rates(c)	2/36(5.6)	1/37(2.7)	2/45(4.4)	3/40(7.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4085			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.7731			
Fisher Exact test(e)		P = 0.3087	P = 0.5000	P = 0.6611
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	15/50(30.0)	21/50(42.0)	15/50(30.0)	12/50(24.0)
Adjusted rates(b)	32.43	42.86	31.11	22.22
Terminal rates(c)	11/36(30.6)	14/37(37.8)	14/45(31.1)	7/40(17.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7587			
Prevalence method(d)	P = 0.9208			
Combined analysis(d)	P = 0.9441			
Cochran-Armitage test(e)	P = 0.2469			
Fisher Exact test(e)		P = 0.1488	P = 0.5862	P = 0.3264
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	6/50(12.0)	9/50(18.0)	10/50(20.0)
Adjusted rates(b)	19.44	16.22	20.00	22.50
Terminal rates(c)	7/36(19.4)	6/37(16.2)	9/45(20.0)	9/40(22.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2047			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2968			
Fisher Exact test(e)		P = 0.5000	P = 0.3929	P = 0.2977

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	7/50(14.0)	10/50(20.0)	11/50(22.0)
Adjusted rates(b)	19.44	16.22	21.74	25.00
Terminal rates(c)	7/36(19.4)	6/37(16.2)	9/45(20.0)	10/40(25.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6092			
Prevalence method(d)	P = 0.1134			
Combined analysis(d)	P = 0.1383			
Cochran-Armitage test(e)	P = 0.2199			
Fisher Exact test(e)		P = 0.6129	P = 0.2977	P = 0.2178
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	4/50(8.0)	4/50(8.0)	1/50(2.0)
Adjusted rates(b)	2.78	10.81	8.89	2.50
Terminal rates(c)	1/36(2.8)	4/37(10.8)	4/45(8.9)	1/40(2.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.6777			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.7421			
Fisher Exact test(e)		P = 0.1811	P = 0.1811	P = 0.7525
SITE : adrenal gland TUMOR : pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	0/50(0.0)	2/50(4.0)	3/50(6.0)	1/50(2.0)
Adjusted rates(b)	0.0	5.41	4.44	2.50
Terminal rates(c)	0/36(0.0)	2/37(5.4)	2/45(4.4)	1/40(2.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4100			
Prevalence method(d)	P = 0.3814			
Combined analysis(d)	P = 0.3686			
Cochran-Armitage test(e)	P = 0.6742			
Fisher Exact test(e)		P = 0.2475	P = 0.1212	P = 0.5000

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	1/50(2.0)	6/50(12.0)	7/50(14.0)	2/50(4.0)
Adjusted rates(b)	2.78	16.22	13.33	5.00
Terminal rates(c)	1/36(2.8)	6/37(16.2)	6/45(13.3)	2/40(5.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4100			
Prevalence method(d)	P = 0.5853			
Combined analysis(d)	P = 0.5674			
Cochran-Armitage test(e)	P = 1.0000			
Fisher Exact test(e)		P = 0.0559	P = 0.0297*	P = 0.5000
SITE : testis TUMOR : interstitial cell tumor				
Tumor rate				
Overall rates(a)	35/50(70.0)	39/50(78.0)	40/50(80.0)	40/50(80.0)
Adjusted rates(b)	81.40	91.89	85.11	88.10
Terminal rates(c)	28/36(77.8)	34/37(91.9)	38/45(84.4)	35/40(87.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4675			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2805			
Fisher Exact test(e)		P = 0.2472	P = 0.1779	P = 0.1779

(HPT360A)

BAIS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
 (c): Observed tumor incidence at terminal kill.
 (d): Beneath the control incidence are the P-values associated with the trend test.
 Standard method : Death analysis
 Prevalence method : Incidental tumor test
 Combined analysis : Death analysis + Incidental tumor test
 (e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
 ? : The conditional probabilities of the largest and smallest possible outcomes can not be estimated or this P-value is beyond the estimated P-value.
 ----- : There is no data which should be statistical analysis.
 Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C. : Statistical value cannot be calculated and was not significant.

APPENDIX P 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : FEMALE

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	5/50(10.0)	11/50(22.0)	11/50(22.0)	5/50(10.0)
Adjusted rates(b)	10.26	17.50	18.42	9.76
Terminal rates(c)	4/39(10.3)	7/40(17.5)	7/38(18.4)	4/41(9.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6587			
Prevalence method(d)	P = 0.6148			
Combined analysis(d)	P = 0.6885			
Cochran-Armitage test(e)	P = 0.6956			
Fisher Exact test(e)		P = 0.0857	P = 0.0857	P = 0.6297
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	10/50(20.0)	13/50(26.0)	12/50(24.0)	10/50(20.0)
Adjusted rates(b)	25.00	27.50	19.15	18.75
Terminal rates(c)	9/39(23.1)	11/40(27.5)	5/38(13.2)	7/41(17.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3702			
Prevalence method(d)	P = 0.7138			
Combined analysis(d)	P = 0.6514			
Cochran-Armitage test(e)	P = 0.8412			
Fisher Exact test(e)		P = 0.3176	P = 0.4048	P = 0.5984
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	11/50(22.0)	13/50(26.0)	12/50(24.0)	10/50(20.0)
Adjusted rates(b)	27.50	27.50	19.15	18.75
Terminal rates(c)	10/39(25.6)	11/40(27.5)	5/38(13.2)	7/41(17.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3702			
Prevalence method(d)	P = 0.7811			
Combined analysis(d)	P = 0.7205			
Cochran-Armitage test(e)	P = 0.6909			
Fisher Exact test(e)		P = 0.4076	P = 0.5000	P = 0.5000

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	4/50(8.0)	4/50(8.0)	2/50(4.0)
Adjusted rates(b)	15.38	10.00	10.53	4.88
Terminal rates(c)	6/39(15.4)	4/40(10.0)	4/38(10.5)	2/41(4.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9315			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1586			
Fisher Exact test(e)		P = 0.3703	P = 0.3703	P = 0.1343
SITE : thyroid TUMOR : C-cell adenoma,C-cell carcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	5/50(10.0)	5/50(10.0)	3/50(6.0)
Adjusted rates(b)	15.38	12.50	13.16	7.32
Terminal rates(c)	6/39(15.4)	5/40(12.5)	5/38(13.2)	3/41(7.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8614			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3082			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.2435
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	1/50(2.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	5.13	2.50	6.82	0.0
Terminal rates(c)	2/39(5.1)	1/40(2.5)	2/38(5.3)	0/41(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8565			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3266			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.2475

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	4/50(8.0)	0/50(0.0)
Adjusted rates(b)	5.13	5.00	9.09	0.0
Terminal rates(c)	2/39(5.1)	2/40(5.0)	3/38(7.9)	0/41(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8607			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3291			
Fisher Exact test(e)		P = 0.6913	P = 0.3389	P = 0.2475
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	5/50(10.0)	10/50(20.0)	11/50(22.0)	9/50(18.0)
Adjusted rates(b)	12.82	21.43	23.68	19.51
Terminal rates(c)	5/39(12.8)	8/40(20.0)	9/38(23.7)	8/41(19.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2431			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3957			
Fisher Exact test(e)		P = 0.1312	P = 0.0857	P = 0.1940
SITE : uterus TUMOR : endometrial stromal sarcoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	4/50(8.0)	3/50(6.0)
Adjusted rates(b)	0.0	0.0	5.26	2.44
Terminal rates(c)	0/39(0.0)	0/40(0.0)	2/38(5.3)	1/41(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6808			
Prevalence method(d)	P = 0.1600			
Combined analysis(d)	P = 0.4567			
Cochran-Armitage test(e)	P = 0.8405			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.6611

STUDY No. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	2500ppm	5000ppm	10000ppm
SITE : mammary gland TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	2/50(4.0)	6/50(12.0)	3/50(6.0)
Adjusted rates(b)	7.69	5.00	13.64	6.38
Terminal rates(c)	3/39(7.7)	2/40(5.0)	5/38(13.2)	1/41(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9261 ?			
Prevalence method(d)	P = 0.4515			
Combined analysis(d)	P = 0.5790			
Cochran-Armitage test(e)	P = 0.9638			
Fisher Exact test(e)		P = 0.3389	P = 0.3703	P = 0.5000

(HPT360A)

BATS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
 (c): Observed tumor incidence at terminal kill.
 (d): Beneath the control incidence are the P-values associated with the trend test.
 Standard method : Death analysis
 Prevalence method : Incidental tumor test
 Combined analysis : Death analysis + Incidental tumor test
 (e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
 ? : The conditional probabilities of the largest and smallest possible outcomes can not be estimated or this P-value is beyond the estimated P-value.
 ----- : There is no data which should be statistical analysis.
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C.: Statistical value cannot be calculated and was not significant.

APPENDIX Q 1

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:
MALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

Group Name		Control	2500ppm	5000ppm	10000ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
{Respiratory system}					
nasal cavit		<50>	<50>	<49>	<50>
	leukemic cell infiltration	0	0	1	0
	metastasis:oral cavity tumor	1	0	0	0
larynx		<50>	<50>	<50>	<50>
	metastasis:thyroid tumor	0	1	0	0
trachea		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
	metastasis:thyroid tumor	0	1	0	0
	metastasis:subcutis tumor	0	1	0	0
lung		<50>	<50>	<50>	<50>
	leukemic cell infiltration	4	4	3	4
	metastasis:thyroid tumor	0	1	0	0
	metastasis:bone tumor	0	1	0	0
	metastasis:zymlal gland tumor	1	0	0	0
	metastasis:thymus tumor	1	0	0	0
{Hematopoietic system}					
bone marrow		<50>	<50>	<50>	<50>
	leukemic cell infiltration	2	2	2	2
lymph node		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	1	3	0
	metastasis:thyroid tumor	0	1	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
{Digestive system}						
salivary gl			<50>	<50>	<50>	<50>
	metastasis:subcutis tumor		1	1	0	0
esophagus			<50>	<50>	<50>	<50>
	metastasis:thyroid tumor		0	1	0	0
	metastasis:subcutis tumor		0	1	0	0
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	3	2	4
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
{Endocrine system}						
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
{Reproductive system}						
prostate			<50>	<50>	<50>	<50>
	metastasis:retroperitoneum tumor		0	1	0	0
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	2	1	0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0497
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 3

		Group Name	Control	2500ppm	5000ppm	10000ppm
Organ	Findings	No. of Animals on Study	50	50	50	50
{Nervous system}						
spinal cord	leukemic cell infiltration		<50> 1	<50> 1	<50> 0	<50> 0
{Body cavities}						
pleura	metastasis:thymus tumor		<50> 1	<50> 0	<50> 0	<50> 0
mediastinum	metastasis:thymus tumor		<50> 1	<50> 0	<50> 0	<50> 0
peritoneum	metastasis:thymus tumor		<50> 1	<50> 0	<50> 0	<50> 0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

(JPT150)

BAIS4

APPENDIX Q 2

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:
FEMALE

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 4

		Group Name	Control	2500ppm	5000ppm	10000ppm
		No. of Animals on Study	50	50	50	50
Organ	Findings					
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	8	9	5
	metastasis:adrenal tumor		0	1	0	0
	metastasis:thyroid tumor		0	1	0	0
	metastasis:bone tumor		0	1	0	0
	metastasis:ovary tumor		0	0	1	0
	metastasis:bone marrow tumor		1	0	0	0
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	4	3	2
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:uterus tumor		1	0	0	0
spleen			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		0	1	0	0
	metastasis:ovary tumor		0	0	1	0
	metastasis:bone marrow tumor		1	0	0	0
{Digestive system}						
large intes			<50>	<50>	<50>	<50>
	metastasis:peritoneum tumor		0	0	1	0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 5

		Group Name No. of Animals on Study	Control 50	2500ppm 50	5000ppm 50	10000ppm 50
Organ	Findings					
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		5	8	8	4
	metastasis:uterus tumor		0	1	0	0
	metastasis:bone marrow tumor		1	0	0	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:uterus tumor		0	1	0	0
	metastasis:ovary tumor		0	0	1	0
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	2	1	0
urin bladd			<50>	<50>	<50>	<50>
	metastasis:peritoneum tumor		0	0	1	0
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
{Reproductive system}						
uterus			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
	metastasis:peritoneum tumor		0	0	1	0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0497
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 6

Group Name No. of Animals on Study		Control 50	2500ppm 50	5000ppm 50	10000ppm 50
Organ	Findings				
{Reproductive system}					
vagina		<50>	<50>	<50>	<50>
	metastasis:uterus tumor	2	0	0	0
	metastasis:peritoneum tumor	0	0	1	0
{Nervous system}					
brain		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	2	0
	metastasis:pituitary tumor	1	0	0	0
spinal cord		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	2	2	0
{Musculoskeletal system}					
muscle		<50>	<50>	<50>	<50>
	metastasis:subcutis tumor	1	0	0	0
	metastasis:ovary tumor	0	0	1	0
bone		<50>	<50>	<50>	<50>
	metastasis:ovary tumor	0	0	1	0
{Body cavities}					
peritoneum		<50>	<50>	<50>	<50>
	metastasis:uterus tumor	0	1	0	0
retroperit		<50>	<50>	<50>	<50>
	metastasis:bone tumor	0	1	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

APPENDIX R

METHODS, UNITS AND DECIMAL PLACE FOR
HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR
DRINKING WATER STUDY OF 2-PHENOXYETHANOL

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR DRINKING WATER STUDY OF 2-PHENOXYETHANOL

Item	Method	Unit	Decimal place
Hematology			
Red blood cell (RBC)	Light scattering method ¹⁾	$\times 10^6/\mu\text{L}$	2
Hemoglobin(Hgb)	Cyanmethemoglobin method ¹⁾	g/dL	1
Hematocrit(Hct)	Calculated as $\text{RBC} \times \text{MCV}/10$ ¹⁾	%	1
Mean corpuscular volume(MCV)	Light scattering method ¹⁾	fL	1
Mean corpuscular hemoglobin(MCH)	Calculated as $\text{Hgb}/\text{RBC} \times 10$ ¹⁾	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as $\text{Hgb}/\text{Hct} \times 100$ ¹⁾	g/dL	1
Platelet	Light scattering method ¹⁾	$\times 10^3/\mu\text{L}$	0
Reticulocyte	Light scattering method ¹⁾	%	1
White blood cell(WBC)	Light scattering method ¹⁾	$\times 10^3/\mu\text{L}$	2
Differential WBC	Pattern recognition method ²⁾ (Wright staining)	%	0
Biochemistry			
Total protein(TP)	Biuret method ³⁾	g/dL	1
Albumin (Alb)	BCG method ³⁾	g/dL	1
A/G ratio	Calculated as $\text{Alb}/(\text{TP} - \text{Alb})$ ³⁾	—	1
T-bilirubin	Alkaline azobilirubin method ³⁾	mg/dL	2
Glucose	GlcK·G-6-PDH method ³⁾	mg/dL	0
T-cholesterol	CE·COD·POD method ³⁾	mg/dL	0
Triglyceride	LPL·GK·GPO·POD method ³⁾	mg/dL	0
Phospholipid	PLD·ChOD·POD method ³⁾	mg/dL	0
Aspartate aminotransferase (AST)	JSCC method ³⁾	IU/L	0
Alanine aminotransferase (ALT)	JSCC method ³⁾	IU/L	0
Lactate dehydrogenase (LDH)	SFBC method ³⁾	IU/L	0
Alkaline phosphatase (ALP)	GSCC method ³⁾	IU/L	0
γ -Glutamyl transpeptidase (γ -GTP)	JSCC method ³⁾	IU/L	0
Creatine kinase (CK)	JSCC method ³⁾	IU/L	0
Urea nitrogen	Urease·GLDH method ³⁾	mg/dL	1
Creatinine	Jaffé method ³⁾	mg/dL	1
Sodium	Ion selective electrode method ³⁾	mEq/L	0
Potassium	Ion selective electrode method ³⁾	mEq/L	1
Chloride	Ion selective electrode method ³⁾	mEq/L	0
Calcium	OCPC method ³⁾	mg/dL	1
Inorganic phosphorus	PNP·XOD·POD method ³⁾	mg/dL	1

1) Automatic blood cell analyzer (ADVIA120 : Bayer Corporation)

2) Automatic blood cell differential analyzer (MICROX HEG-120NA : OMRON Corporation)

3) Automatic analyzer (Hitachi 7080 : Hitachi,Ltd.)