プロピオノニトリルのラットを用いた 吸入によるがん原性試験報告書

試験番号:0535

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APPENDIX A 1

IDENTITY OF PROPIONONITRILE IN THE 2-YEAR INHALATION STUDY

IDENTITY OF PROPIONONITRILE IN THE 2-YEAR INHALATION STUDY

Test Substance : Propiononitrile (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : PKK4727

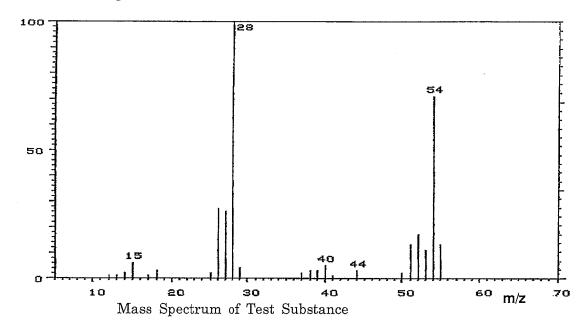
1. Spectral Data

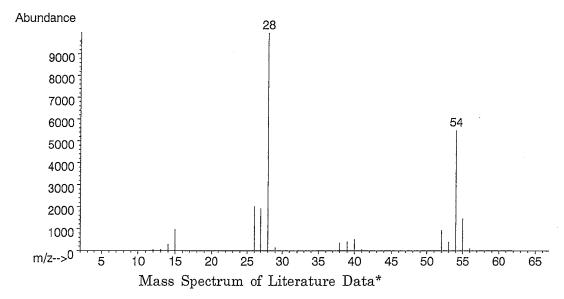
Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV





Result: The mass spectrum was consistent with literature spectrum.

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

Infrared Spectrometry

Instrument

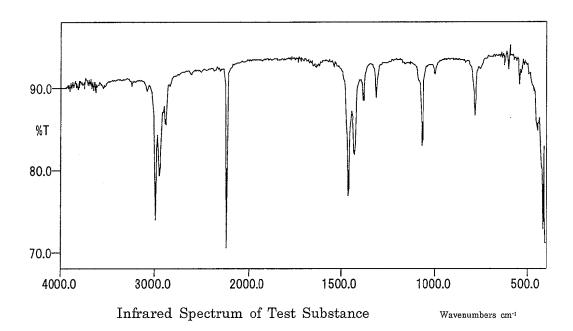
: Shimadzu FTIR-8200PC Infrared Spectrometer

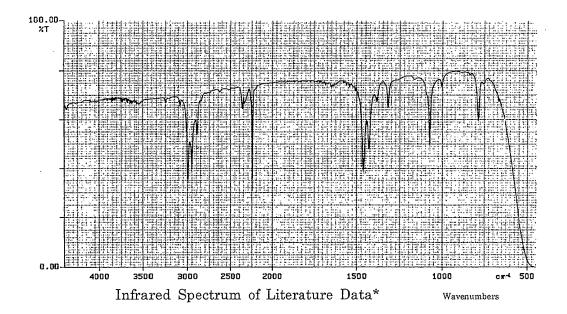
Cell

: KBr Liquid Cell

Resolution

: 4 cm⁻¹





Result: The infrared spectrum was consistent with literature spectrum. (*Performed by Wako Pure Chemical Industries, Ltd.)

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

B. Lot No.

: CEL7045

1. Spectral Data

Mass Spectrometry

Instrument

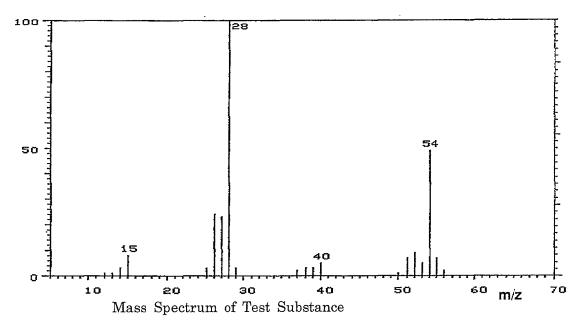
: Hitachi M-80B Mass Spectrometer

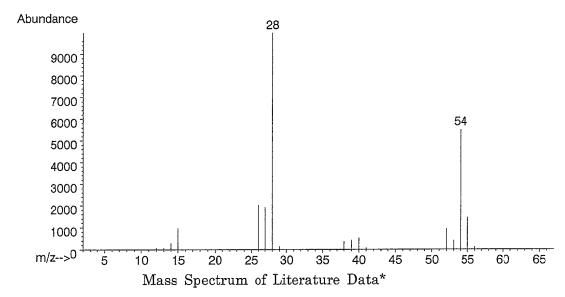
Ionization

: EI (Electron Ionization)

Ionization Voltage

: 70eV





Result: The mass spectrum was consistent with literature spectrum.

(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.

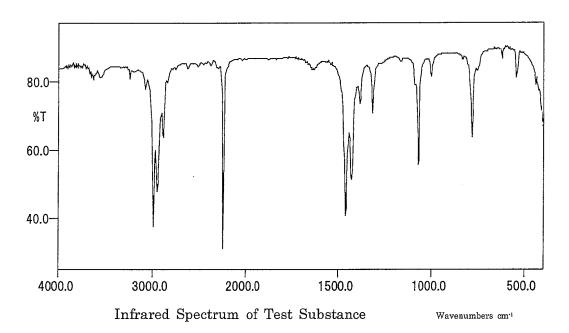
New York, NY: John Wiley and Sons.)

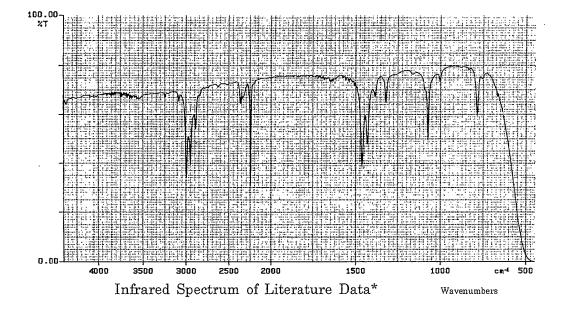
Infrared Spectrometry

Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm⁻¹





Result: The infrared spectrum was consistent with literature spectrum. (*Performed by Wako Pure Chemical Industries, Ltd.)

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

C. Lot No.

: SDM0881

1. Spectral Data

Mass Spectrometry

Instrument

: Hitachi M-80B Mass Spectrometer

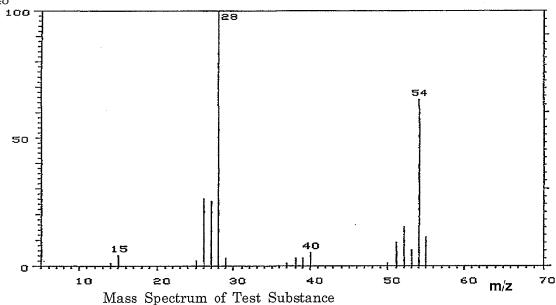
Ionization

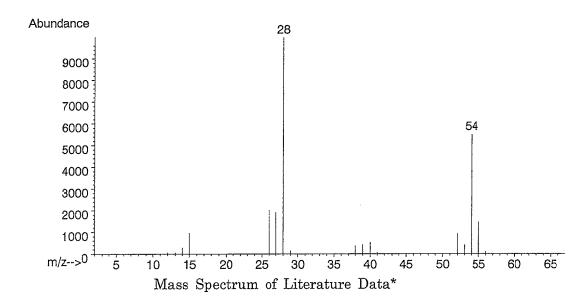
: EI (Electron Ionization)

Ionization Voltage

: 70eV

75 148





Result: The mass spectrum was consistent with literature spectrum.

(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.

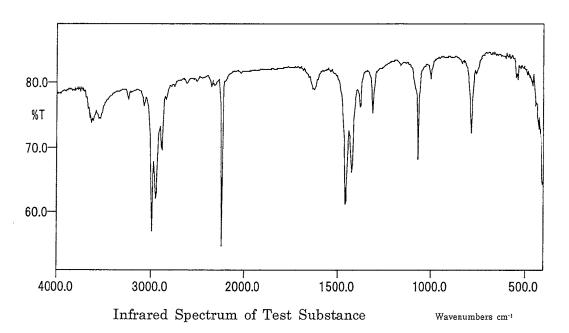
New York, NY: John Wiley and Sons.)

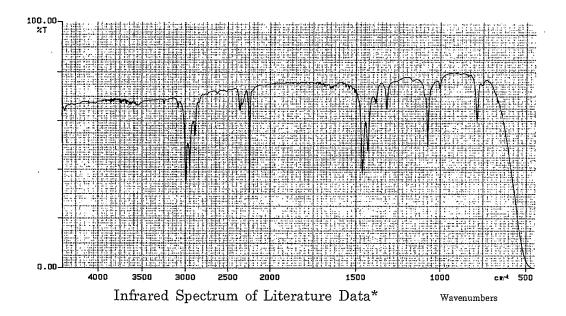
Infrared Spectrometry

Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm⁻¹





Result: The infrared spectrum was consistent with literature spectrum. (*Performed by Wako Pure Chemical Industries, Ltd.)

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

APPENDIX A 2

STABILITY OF PROPIONONITRILE IN THE 2-YEAR INHALATION STUDY

STABILITY OF PROPIONONITRILE IN THE 2-YEAR INHALATION STUDY

Test Substance

: Propiononitrile (Wako Pure Chemical Industries, Ltd.)

A. Lot No.

: PKK4727

1. Gas Chromatography

Instrument

: Hewlett Packard 5890A Gas Chromatograph

Column

: Methyl Silicone (0.53 mm ϕ \times 60 m)

Column Temperature: 80° C

Flow Rate

: 10 mL/min

Detector

: FID (Flame Ionization Detector)

Injection Volume

 $: 1 \mu L$

Date Analyzed	Peak No. (min)	Retention Time (%)	Area
2003.11.28	1	3.770	100
2004.11.10	1	3.768	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2003.11.28 and one major peak (peak No.1) analyzed on 2004.11.10. No new trace impurity peak in the test substance analyzed on 2004.11.10 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.

: CEL7045

1. Gas Chromatography

Instrument

: Hewlett Packard 5890A Gas Chromatograph

Column

: Methyl Silicone (0.53 mm ϕ × 60 m)

Column Temperature: 80° C

Flow Rate

: 10 mL/min

Detector

: FID (Flame Ionization Detector)

Injection Volume

: 1 μL

Date Analyzed	Peak No. (min)	Retention Time (%)	Area
2004.11.05	1	3.768	100
2005.06.24	1	3.783	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2004.11.5 and one major peak (peak No.1) analyzed on 2005.6.24. No new trace impurity peak in the test substance analyzed on 2005.6.24 was detected.

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

C. Lot No.

: SDM0881

1. Gas Chromatography

Instrument

: Hewlett Packard 5890A Gas Chromatograph

Column

: Methyl Silicone (0.53 mm ϕ × 60 m)

Column Temperature: 80° C

Flow Rate

: 10 mL/min

Detector

: FID (Flame Ionization Detector)

Injection Volume

 $: 1 \mu L$

Date Analyzed	Peak No. (min)	Retention Time (%)	Area
2005.06.17	1	3.771	100
2005.12.05	1	3.769	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2005.6.17 and one major peak (peak No.1) analyzed on 2005.12.5. No new trace impurity peak in the test substance analyzed on 2005.12.5 was detected.

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

APPENDIX B

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

Group Name	Temperature (°C) Mean ± S.D.	Humidity (%) Mean ± S.D.	Ventilation Rate (L/min) Mean ± S.D.	Air Change (time/h) Mean
Control	23.1 ± 0.2	57.0 ± 1.0	1520.9 ± 12.2	12.0
$25~\mathrm{ppm}$	23.1 ± 0.1	55.4 ± 1.3	1521.3 ± 12.6	12.0
50 ppm	23.2 ± 0.2	55.3 ± 1.3	1516.2 ± 11.7	12.0
100 ppm	23.1 ± 0.2	57.3 ± 0.9	1515.4 ± 11.7	12.0

APPENDIX C 1

CLINICAL OBSERVATION: MALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

linical sign	Group Name	Admini	stration We	eek-dav											
		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
атн	Control	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
••••	25 ppm	0	Ŏ	0	0	0	0	0	0	0	0	0	0 . 0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	0	ő	0	0	0	0	0	0	0	0	0	0	0	0 0
RIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0	0 0	0 0	0
NORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	٥
V1121	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
										U	U	U	U	U	U
STING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
EATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ō
ARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	Ö	Ö	Ö	Ö	Ö	0	0	Ö	Ö	ŏ
BNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ō	Ŏ	Ö	Ŏ	Ö	0	Ŏ	0	ů	0	0	Ö
	50 ppm	0	0	0	Ó	0	0	0	0	0	0	0	0	0	Ö
	100 ppm	0	0	0	0	0	0	Ō	0	Ö	ō	0	0	ō	ŏ
ASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	Õ	Ŏ	0	0	0	0	0	0	0	0	0	0
	50 ppm	Ö	ő	0	Ö	0	0	0	0	0	0	0	0	0	0
	100 ppm	ő	ő	ő	0	0	ő	Ö	0	0	0	0	0	0	0
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

linical sign	Group Name	Admini	stration \	eek−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
7.A. (TVI)	0 . 1	•			_	_									
ATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0 .	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррш	0	0	0	0	Ô	Ō	0	Ö	0	0	0	0	Ö	ő
	50 ppm	0	0	0	Ö	0	0	0	Ö	Ô	ŏ	0	0	Ö	0
	100 ppm	0	Ō	ō	Ö	Ö	0	ő	Ö	0	ő	ő	0	ő	0
XIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0		0	-					
	100 ppm	0	0	0	0	0	0	0 0	0	0 0	0 0	0 0	0 0	0 0	0
ALYTIC GAIT	Control	0	0	0	0	0	0	0	0	^		^	•	•	
undillo dall	25 ppm	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
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	Ō	0	0	ō	Ő
TING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ŏ	Ŏ	Ö	Ö	Ö	Ô	0	0	0	0	0	0
	50 ppm	Ö	Ŏ	Ô	0	Ö	0	0	0	0	0	0	0	0	0
	100 ppm	ő	0	ő	0	0	0	0	0	0	0	0	0	0	0
OERECTION	Control	0	0	0	0	0	0	0	0	0	0	٥	^	٥	^
	25 ppm	0	0	0	0		0	0	0	0	0	0	0	0	0
						0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration W	eek-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
ЕАТН	Control	0	0	•	٥	^	^	•	•	•	•	•	•	•	
Latin	25 ppm	0	0	0 0	0 0	0 0	0 0	0	0	0 0	0	0 0	0	0	0
	50 ppm	0	0	0	0	0					0	-	0	0	0
	100 ppm	0	0	0	0	0	0 0								
DRIBUND SACRIFICE	Control	0	0	0	0	1	1 -	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	ō	0
	50 ppm	0	0	0	0	0	0	0	1	1	1	1	i	1	1
	100 ppm	0	0	0	0	0	0	0	ō	ō	ō	ō	Ō	Ō	0
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAXIC GAIT	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0	0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0	0	0	0
4D41VM70 0.1TM													Ū		V
ARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UMBLE	Control	0	0	0	1	0	0	. 0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASTING	Control	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

linical sign	Group Name	A J	istration W	lanir_J			-								
iinicai sign	Group Name	Admin: 57-7	1stration w 58-7	теек-дау 59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
															•••
EATH	Control	0	0	0	0	0	0	0 .	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0 -	0	0	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	Ö	0	Ŏ	Ö	ō	Ö	Ö	Ö	Ö	Ö	0
BNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	Ô	0	0	0	0	0	0	0	0
	50 ppm	Ö	ŏ	0	Ŏ	Õ	Ö	ŏ	ŏ	0	0	0	Ö	Ŏ	0
	100 ppm	0	Ö	Ö	Ö	ŏ	ő	Ö	ő	0	ő	0	ő	ő	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Õ	ŏ	0	Ŏ	Ŏ	Ö	Ö	0	0	0	0	Ô	0
	50 ppm	Ö	Ŏ	0	0	0	Ô	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
	roo bbm	v	v	v	U	v	v	U	v	V	V	U	v	v	v

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

SEX : MALE															PAGE :
Clinical sign	Group Name		istration W												
		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	0	1	1	1	1	1	1	1	,	0	9	0
	25 ppm	0	0	0	0	0	0	1 1	1 1	1 1	1	1	2	2	2
	50 ppm	1	1	1	1	1	1	1	1	1	1 2	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	2 0	2 1	2 1	2 1
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	50 ppm 100 ppm	0	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0
DIDITUTTO OLTA					-				-			•			
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	1 0	0	0	0	0	0	0	0	0	0	0	0	. 0
	Too ppm	U	U	U	U	U	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

linical sign	Group Name	Admini	stration We	eek-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
													•		
EATH	Control	2	2	2	2	2	2	2	2	2	2	2	2	3	3
	25 ррш	1	1	1	1	1	1	1	2	2	2	3	4	4	4
	50 ppm	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	100 ppm	1	1	3	3	4	4	4	4	4	4	4	5	6	8
RIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	50 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	100 ppm	1	1	1	1	1	1	1	2	3	3	3	3	3	3
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
'AXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррш	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	Ō	Ŏ	0	Ö	Ö	Ö
NORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	Ö	0	ō
	100 ppm	0	0	0	0	0	0	ō	Ō	ō	0	0	ő	Ö	0
STING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	Ô	0	Ō	0	Ō	Õ	1	ŏ	0	Ö	Ů.
	50 ppm	0	0	0	Ö	Õ	Ŏ	Ö	Ö	0	0	0	0	Ö	0
	100 ppm	0	Ö	ő	Ö	0	Ö	ŏ	1	Ö	Ö	ő	0	ő	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ŏ	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	ő	Ŏ	Ö	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0 .	0	0	0	0	0	1	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration '	Vook-dow					 	
JIIIIOGI BIĞII	oroup name	99-7	100-7	101-7	102-7	103-7	104-7		 	
ЕАТН	Control	3	4	4	4	4	4			
DA1111	25 ppm	4	4	4	4 4	4	4			
	50 ppm	4	4	4		4 5	4			
	100 ppm	9	9	9	4 9	9	5 10			
ORIBUND SACRIFICE	Control		•		•	0				
OKIDOND BACKIFICE	25 ppm	1	1	1	1	2	2			
		2	2	2	2	2	2			
	50 ppm	3	3	3	3	3	3			
	100 ppm	4	4	4	4	4	4			
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
TAXIC GAIT	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	Ō	Ö	Ŏ	0	Ö			
	100 ppm	ō	Ö	ő	ŏ	Ö	Ö			
ARALYTIC GAIT	Control	0	0	0	0	0	0			
and Difficulties	25 ppm	0	0	0	0	0	0			
	50 ppm						0			
		0	0	0	0	0	0	•		
	100 ppm	0	0	0	0	0	0			
UMBLE	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
BNORMAL GAIT	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	1	1	1	0	0			
	100 ppm	0	0	0	0	0	0			
ASTING	Control	0	0	0	0	0	0			
	25 ppm	0	0	0						
					0	0	0			
	50 ppm 100 ppm	0 0	0 0	0 0	1 0	1 0	2 0			
TI ADDECTION		^	•	•	•	•				
ILOERECTION	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

PAGE: 9

SEX : MALE

Clinical sign	Group Name	A J	stration W	13											
TIMICAL SIGN	Group Name	1-7	2-7	еек-дау 3-7	4-7	5-7	6–7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
RAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0 -	0
OG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLLED PERI-GENITALIA	Control	0 .	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ŏ	Ö	Ö	Ö	Ō	. 0	0	0	0	0	0	0	0	0
	50 ppm	Ö	Õ	Ö	ŏ	ő	Ö	Ö	0	Ö	Ő	Ö	0	Ö	0
	100 ppm	.0	ő	0	0	0	0	0	0	0	0	0	0	0	0
KOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	1	1		-	-	-	
	100 ppm	0	0	0	0	0	0	0	0	0	1 0	1 0	1 0	1 0	1 0
ATARACT	Control	0	0	0	0	0	0	. 0	0	1	1	,	,	,	,
imulo i	25 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1 0	1
				0						0	0	0	0		0
	50 ppm	0	0		0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DRNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ó	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	Ô	0	Ö	ō
	100 ppm	0	0	0	0	0	0	0	0	0	Ō	0	Ō	ŏ	ŏ
TERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	ō	Ö	Ŏ	Ö	Ö	Ŏ	Ö	0	0	Ŏ	Ô	0	0
	50 ppm	Ŏ	ő	Ö	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	ő	0	0	0	0	0	0	0	0	0	0	0	0
TERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0		0			0		
	50 ppm	0		0		-			0	-	0	0	•	0	0
		0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	U	U	U	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	istration \	eek-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
RAUMA	Control	0	0	0	0	0	0	0	0	0	٥	0	•	•	
MORIA	25 ppm	0	0	0	0	0 0	0 0	0	0	0	0	0 0	0	0	0
	50 ppm	0	0	Ö	0	0	0	0	0	0	0	0	0		
	100 ppm	0	ő	0	0	0	0	0	0	0	0	0	0	0 0	0 0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0 .	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OPHTHALMOS	Control	0	0	0	0	0	0	0	0	.0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	1 0	1 0	1 0	0	1 0									
TARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	ō	0	ō	0	0	0	ō
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DRNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0 0	0 0	0	0 0							
TERNAL MASS	Control	ĵ0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	v	v	U	U	U	U	U	U	U	U	U	U	U	U

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

REPORT TYPE : A1 104

SEX : MALE

O1															PAGE: 1
Clinical sign	Group Name	Admini 29-7	stration W	/eek-day _ 31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
				JI (32 1		34-1	30-1	30-1	əi−i	20-1		40-7	41-1	42-1
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	ō	Ö	ŏ	Ö	0	0	Ŏ	0	0	0	0	Ö
	50 ppm	0	0	0	0	0	0	0	Ŏ	0	0	Ö	0	ŏ	Ö
	100 ppm	0	0	0	0	0	0	0	0	0	0	Ō	Ō	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	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
	25 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration We	ek-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
			•												
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ō	0	0	0	ō	0	Ö	Ŏ	Ö	Ö	Ů	0
	50 ppm	0	0	0	0	Ō	Ô	Ŏ	Ö	Ö	Õ	0	Ö	Ů	Ö
	100 ppm	0	ō	0	ő	Õ	ō	ő	ő	ő	ŏ	ő	ő	ő	0
XOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	0	ŏ	Ö	0	Õ	Ö	0	Õ	0	Ő	0	0
	50 ppm	1	1	1	í	1	1	1	1	1	1	1	1	1	1
	100 ppm	ō	Ō	0	Ō	Ô	0	0	0	0	0	0	ō	0	0
ATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	ō	ō	ō	0	Ô	0	Ô	Ô	0	Ō	0	0
	50 ppm	0	Ō	1	í	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	ō	ō	õ	ō	ō	1	î	i	1	1	ì	ĩ
ORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ŏ	Ŏ	Õ	Ö	Ö	Ů	Ö	0	Õ	0	0	Ö	0	Ŏ
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	Ō	0	Ô	Ō	0	0	0	0	0	0	0	0	0
NTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	,
mioo	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1 0	1
	20 ppm 50 ppm	0	0	0				-	-			-	•		0
	100 ppm	0	0	0	0 0	0 0	0 1	0 2							
NTERNAL MASS	0 . 1		^	6	•	•	_	•	•	•	•	•	-	_	_
MADD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	istration W	ook-day	•••									, ,	
TIMICAL SIGN	Group Name	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
RAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	Ō	0	0
OPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	ĭ	1	1	1	1	1	1	1	i	1	1	1
	100 ppm	0	ō	ō	ō	ō	Ō	ō	0	0	Ō	ō	ō	Ō	ō
TARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	ō	ō	ō	ō	ī	1
	50 ppm	1	1	1	1	1	1	1	1	1	i	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	0	0	0	0	Ŏ	0	0	0	0	0	0	Ō	0
	50 ppm	ĺ	1	i	1	1	1	1	1	1	1	1	i	1	1
	100 ppm	ō	Ô	ō	ō	0	0	0	ō	ō	0	0	0	0	0
TERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ŏ	Ö	0	ŏ	ŏ	0	0	Ö	0	0	0	0	ő	Ô
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0						
	100 ppm	v	U	U	U	v	U	U	U	0	0	0	0	0	0
TERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	2	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0 .	0	0	0	0	0	0	0	0	0	0
	100 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	3
ITERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

PACE : 1A

Clinical sign	Group Name	Admin: 71-7	istration W	eek-day _ 73-7	74-7	75-7	76-7	77-7	78-7	79-7	00.7	81-7	00.7	00.7	04.7
		11.1	12-1			19-1	10-1		10-1	19-1	80-7	81-1	82-7	83-7	84-7
TRAUMA	Control	0	0	0 -	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ö	Ö	ŏ	Ŏ	Ö	0	0	0	0	0	0	0	Ö
	50 ppm	0	0	0	Ō	0	0	0	Ö	Ů.	0	0	Ö	Ö	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	Ō	Ō	Ŏ
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	100 ppm	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	. 1	1	1	1	1	1	1
	100 ppm	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	0	0	0
	25 ppm	1	1	1	1	1	1	1 -	1	1	1	2	2	2	2
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	. 1	1	1	1	1	1	1	1	1	1	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	3	3	3	3	3	3	3	3	3	2	2	2
	25 ppm	0	0	2	3	3	3	2	2	2	2	2	2	2	3
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	100 ppm	3	3	4	4	6	6	6	6	7	7	7	7	7	8
INTERNAL MASS	Control	0	2	2	1	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

SEX : MALE															PAGE :
Clinical sign	Group Name		istration W												
		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
rauma	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ICIONEI	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	Ö	Ö	0	ő	ő	0	Ö	0	0	0	0	0	0	ŏ
	100 ppm	0	Ö	ő	1	1	1	1	1	1	1	ĭ	1	í	Ö
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
XOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0
CATARACT	Control	0	0	0	0	0	0	0	0	1	1	1	1	0	0
	25 ppm	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	50 ppm	2	2	2	2	3	3	3	3	3	3	3	3	3	3
	100 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
NTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	1	0	0	. 0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	0
EXTERNAL MASS	Control	3	3	3	4	6	6	7	6	7	7	7	7	6	6
	25 ppm	3	4	5	6	6	6	7	7	8	8	9	8	8	9
	50 ppm 100 ppm	0 8	2 8	2 7	4 9	4 9	4 9	4 8	5 9	5 8	6 10	5 10	5 11	5 11	5 10
TAIPEDATAT MACC				0											
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	1	1	1	2	1	1

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX: MALE

	Group Name	Admin	istration '	Keek-day						
linical sign	oroup namo	99-7	100-7	101-7	102-7	103-7	104-7			
RAUMA	C-++1	0	٥	^	٥	0	^			
RAUMA	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
ROG BELLY	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	1	1	0	0			
	100 ppm	0	0	0	0	0	0			
OILED PERI-GENITALIA	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
XOPHTHALMOS	Control	0	0	1	1	1	1			
	25 ppm	0	0	0	0	0	0			
	50 ppm	1	1	1	1	1	1			
	100 ppm	0	0	0	0	0	0			
ATARACT	Control	0	0	1	1	1	1			
	25 ppm	3	3	3	3	3	4			
	50 ppm	3	3	3	3	3	3			
	100 ppm	1	1	1	1	1	1			
ORNEAL OPACITY	Control	0	0	0	0	0	0			
ORIGINE OF NOTE	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
TEDIOD CHAIDED ODACTES	O to 1	^	^	0	•	•	^			
TERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	. 0	0 0	0 0	0	0			
	100 ppm	0	U	U	U	0	0			
KTERNAL MASS	Control	6	7	8	9	9	11			
	25 ppm	9	8	9	. 9	9	10			
	50 ppm	5	6	7	7	7	7			
	100 ppm	9	10	11	11	13	12			
NTERNAL MASS	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	ō	ŏ	Ö	Ö	Ŏ	Ö			

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration We	ek-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
Noan					•							_	•		
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	.0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI EAR	Control	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	25 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	Ö	0	0	Ō	Ö	0	Ö	0	0	0	Ô	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ō	Ŏ	Ŏ	Ŏ	Ŏ	Ö	Ŏ	ō	Ŏ	Ŏ	ŏ	Ŏ	Ö	Ö
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	Ō	0	0	0	0	0	0	0
BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	. 25 ppm	Ŏ	0	Ŏ	Õ	Ö	Ŏ	0	Ö	0	Ö	0	Ŏ	Ŏ	Ŏ
	50 ppm	0	0	0	0	0	Ö	0	0	0	0	0	0	Ö	ő
	100 ppm	ő	0	Ö	0	0	Ö	Ö	ő	0	Ö	ő	Ö	ő	0
ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A ALCO VIIIIII I	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	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
	100 ppm	U	V	U	U	U	U	U	U	O	U	U	U	U	v

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	25 ppm	0	Ŏ	0	0	0	Ö	0	0	0	0	0	0	0	0
	50 ppm	Ö	Ö	Ŏ	0	0	Ö	Ö	Ö	0	Ö	Ö	Ö	0	0
	100 ppm	0	Ō	0	Ö	Ö	Ö	Ō	ō	ŏ	ō	ō	ō	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0 .	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

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SEX : MALE

SEX : MALE															PAGE: 19
Clinical sign	Group Name		istration W												
		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. NOSE	Control	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ŏ	0	0	0	0	0	0	0	0	0	0	ő	Ů	Ö
	50 ppm	ŏ	ŏ	ŏ	Ŏ	Ö	ŏ	0	ő	ő	0	0	0	Ö	0
	100 ppm	0	Ō	Ö	ō	ō	Ö	Ö	0	Ö	ō	ő	ő	Ö	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
M. I DAL DIN	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	Ö	ŏ	Ö	0	Ö	Ö	ő	ő	ő	ő	ő	0	ŏ	0
	100 ppm	Ö	o o	ő	ő	ő	ő	Ö	ő	0	Ö	0	Ö	Ö	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	100 ррш	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name		stration W												
		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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	ő	0	0	0	o o	0	0	0	0	0	0	0	0
	50 ppm	Ö	Ö	. 0	0	0	0	0	0	0	0	0	0	Ö	0
	100 ppm	0	ō	0	Ö	0	ő	ő	ő	0	0	ō	ő	ŏ	0
.PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
I. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
CODEL THE		•	•	•	0	0	^	^	•	^			•	^	^
I. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	Ų	U	0	0	0	. 0	0	0	0	0	0	0	0
I. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0	0 0									
M. ABDOMEN	Control	0	0	0	0	۸	0	0	0	^	^	0	^	^	^
ייי עולאע\עווען			•	-		0	-	0	-	0	0	-	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
I. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. 1.002	25 ppm	Ö	ő	Ö	Ö	0	0	0	Ö	0	0	0	0	0	0
	50 ppm	0	0	Ō	Ŏ	Õ	Ŏ	Ö	ō	Ö	Ō	Ö	Ŏ	0	ŏ
	100 ppm	0	0	Ō	ō	ō	0	ō	Ö	0	Ō	Ö	Ō	ō	ō
PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERT EIN	25 ppm	Ŏ	Ö	ő	0	Õ	Ö	0	0	Ő	0	0	0	0	0
	50 ppm	0	ŏ	ŏ	Ö	0	Ŏ	0	Ŏ	ŏ	0	ő	Ö	0	ŏ
	100 ppm	Ö	ō	Ö	Ö	0	0	0	0	0	0	0	0	Ö	0
NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

DEA - MALE															PAGE: 2
Clinical sign	Group Name	Admin	istration W						·						
		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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W. 140212	25 ppm	0	0	0	0	0	0	0	0	0	0	0 0	0	0 0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EAR	Control	0	0 .	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
W Dent Pan															
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0
M ARCV		^	•	•		•	•	•	•	•	•	•	•	•	•
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ő	Ö	ő	0	0	Ö	0	0	0	0	0	0	0	ő
	50 ppm	Ö	Ŏ	ő	Ö	0	ŏ	Ö	ő	ő	0	Ö	Ö	0	Ö
	100 ppm	ō	ō	Ö	Ö	0	Ö	Ö	0	Ö	Ö	Õ	Ö	Ö	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ŏ	ō	0	Ŏ	0	Ŏ	ŏ	Ö	Ö	Ŏ	0	ō	Ö
	50 ppm	Ö	0	ŏ	Ö	Ö	Ö	ő	ő	Ö	0	1	1	0	Ö
	100 ppm	Ŏ	Õ	Ö	Ö	o	o	Ö	ő	Ö	ő	0	0	ő	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	2
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	2	2	3	3	3	3	3	3	3	3	3	4

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

linical sign	Group Name	Admini	stration W	eek-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
NOOP		•			•				•	•	2		•	•	•
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	50 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
PERI-MOUTH	Control	0	0	0	1	2	2	2	1	1	1	1	1	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	Ō	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	0
NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	Ō	0	0	0	0	0	0	0
	50 ppm	0	0	Ō	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Ö	ŏ	Ö	Ö	0	Ö	Ō	ō	0	Õ	Ö	Ō	0	0
FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	ō	0	ō	ō	ō	ō	ō	Õ	ō	Õ	ō	0	ō	Õ
	50 ppm	0	0	Ö	ŏ	ő	Ŏ	Ŏ	0	0	Ö	Ö	0	0	0
	100 ppm	Ö	0	Ö	1	2	2	1	1	0	1	1	1	1	i
BREAST	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	25 ppm	Ŏ	1	1	1	1	1	2	2	2	2	2	2	2	2
	50 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	1	1	1	. 1	1	1	1
	100 ppm	U	v	v	U	U	v	U	1	1	1	. 1	ı	ı	1
ABDOMEN	Control	0	0	0	0	0	0	1	1	1	1	2	2	2	2
	25 ppm	2	2	2	3	3	4	4	4	5	5	5	4	4	4
	50 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	4	4	3	3	3	3	3	3	3	3	3	3	3	3

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

REPORT TYPE : A1 104

SEX : MALE

Clinical sign	Group Name	Admin	istration	Week-day				
· ·	• ***	99-7	100-7	101-7	102-7	103-7	104-7	
I. NOSE	Control	0	0	0	0	0	0	
	25 ppm	1	1	1	1	1	1	
	50 ppm	0	0	0	0	0	0	
	100 ppm	1	1	1	1	1	1	
PERI-MOUTH	Control	0	0	0	. 0	0	0	
	25 ppm	Ō	0	0	0	Ō	0	
	50 ppm	Ô	0	Ö	Ö	Ö	ő	
	100 ppm	0	0	0	0	0	0	
MANDIBULAR	Control	0	0	0	0	0	0	
	25 ppm	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	
	100 ppm	1	1	1	1	1	-1	
EAR	Control	0	0	0	0	0	0	
	25 ppm	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	
	100 ppm	0	0	0	0	0	0	
.PERI EAR	Control	٥	0	0	0	0	0	
FERT BAR	CONTROL	0						
	25 ppm	1	1	1	1	1	1	
	50 ppm	0 0	0 0	0 0	0 0	0 0	0 0	
	100 ppm	U	U	v	U	U	U	
. NECK	Control	0	0	1	1	1	1	
	25 ppm	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	
	100 ppm	0	0	0	0	0	0	
FORELIMB	Control	1	1	1	1	1	1	
	25 ppm	Ō	0	0	0	Ō	0	
	50 ppm	ő	0	0	0	ő	0	
	100 ppm	1	1	1	1	1	1	
	roo hhm	1	1	1	1	ī	ı	
. BREAST	Control	1	2	2	3	3	3	
	25 ppm	2	2	3	3	3	3	
	50 ppm	1	1	2	2	2	2	
	100 ppm	1	1	2	2.	3	2	
ABDOMEN	Control	2	2	2	2	2	2	
	25 ppm	4	4	4	4	4	3	
	50 ppm	1	1	1	1	1	1	
	100 ppm	3	3	3	3	4	4	
	100 bbut	٥	o	ð	v	4	4	

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Adminis	tration We	ek-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
ANTEDIOD DODGINA	C+1	٥	0	0	0	0	0	•	0	^	•	•	^	•	•
I. ANTERIOR. DORSUM	Control 25 ppm	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
	50 ppm 100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IONDIOD	25 ppm	0	0	0	0	0	0	Ö	Ö	0	0	Ö	Ö	ō	ő
	50 ppm	0	0	. 0	0	0	Ö	0	0	0	0	0	0	0	0
	100 ppm	Ö	ő	. 0	Ö	ő	0	ő	ő	ő	0	0	ŏ	ő	ő
CER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	ō	Ô	0	Ö	0	0	Ō	0	0	. 0	0	0	0
	50 ppm	0	Õ	Õ	Ö	Ŏ	0	Ö	ő	0	Õ	Ö	Ŏ	Ö	0
	100 ppm	0	0	0	Ö	0	Ö	Ō	0	0	0	0	0	0	0
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

: RAT F344/DuCrICrIj[F344/DuCrj] ALL

REPORT TYPE : A1 104

SEX : MALE

Clinical sign	Group Name	Admini	stration We	eek-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
I. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. HATEKTOK. DOKOGM	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0 .	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0 .	0	0	0	0	0
SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ŏ	ő	ŏ	Ŏ	Ŏ	Ŏ	Ö	Ö	Ŏ	Ö	Ö	Ö	ŏ	0
	50 ppm	0	Ō	0	Ō	0	Ō	0	Ō	0	0	0	o o	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0 .	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration We	eek-dav											
	-	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
ANTERIOR, DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTENTON: DONSON	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	. 0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	100 ppm	0	0	0	0	0	0	. 0	. 0	0	0	0	o	0	0
POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
VEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINITOLI	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	0	0	ő	0	0	0	Ö	0	Ő	Ŏ	Ŏ	0	0
	50 ppm	0	Ö	0	0	0	0	0	0	0	0	0	ő	0	ŏ
	100 ppm	Ŏ	ő	ŏ	ő	ŏ	ő	ő	ŏ	ő	ő	0	ő	ŏ	ő
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	o o	Ö	0	Ŏ	Ö	0	Ô	0	0	0	Ö	0	ŏ	Ö
	50 ppm	Ō	Ö	Ö	ŏ	0	Ö	Ŏ	Ö	Ö	Ö	ŏ	0	0	0
	100 ppm	Ö	Ŏ	Ŏ	ŏ	Ö	ŏ	ŏ	0	Ö	Ö	Ŏ	ŏ	Ŏ	Ö

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration We	eek-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
ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
. AITERIOR. DONOM	25 ppm	0	0	0	0	0	0	0	0	0	0 0	0 0	0 0	1 0	1 0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ō	0	ō	Ö	Ö	0	Ō	Ö	0	Ö	ŏ	ō	Ö	Ŏ
	50 ppm	0	0	0	0	Ō	0	0	0	0	0	Ō	0	Ō	. 0
	100 ppm	0	0	0	0	Ö	0	0	Ō	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0	0	0 0	0	0
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOLD LOD	25 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	0	0	ō	Ŏ	Ö	ŏ	0	Ŏ	Ö	Ŏ	Ö	Ŏ
	50 ppm	0	ŏ	ő	ō	ō	ŏ	ő	ő	Ö	Ő	Ö	Ŏ	Ŏ	Ö
	100 ppm	0	0	Ō	Ŏ	Ö	Ö	ō	Ö	Ö	0	0	Ŏ	ō	0
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration We	ek-day											
-		57-7	587	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. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
a fatibilities bombon	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ô	0
	50 ppm	Ö	Ŏ	0	0	0	Ö	0	0	0	0	0	0	0	0
	100 ppm	Ŏ	ő	0	0	0	Ö	ő	o	ő	0	0	ŏ	ő	Ö
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	0	0	0	0	1	1	1	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

SEX: MALE		,													PAGE: 3
Clinical sign	Group Name	Admin	istration W	eek-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. ANTERIOR. DORSUM	Control	1	1	2	2	2	2	2	2	2	2	2	1	1	1
	25 ppm	ō	ō	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	ō	ō	Õ	0	ō	ō
	100 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0 .	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0	0 0	0	0 0	0 0							
	100 ppm	v	U	U	Ū	U	V	v	U	V	U	v	U	U	V
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0	0 0	0	0 0	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1.	1	1	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : Al 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration W	eek-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
AND TOD DODOLDA	0 . 1								_	_					
ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	1	2	2	2	2	2	2	2
	100 ppm	1	1	1	1	1	2	2	2	1	1	1	1	1	1
POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	2	2	2	2	1	1	0	0	0	1	1	1	1	1
HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	Ō	Ö	0	0	Ö	0
	50 ppm	0 .	0	0	0	0	0	0	0	0	0	0	0	Ō	Ō
	100 ppm	0	0	0	0	0	0	0	0	Ō	0	0	Ō	0	0
GENITALIA	Control	1	1	1	1	2	2	2	1	1	1	1	1	1	1
	25 ppm	ō	Ô	Ô	0	0	0	0	0	Ô	0	0	0	. 0	ō
	50 ppm	Ö	Ŏ	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SCROTUM	Control	0	0	0	0	0	0	0	1	1	1	0	0	0	0
CONOTOM	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm 50 ppm	0	0	0								-	0	-	-
			-		0	0	0	0	0	0	0	0	-	0	0
	100 ppm	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	1	1	1	1	1	0	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	0	0	0	0	0	0	1	1	0	0
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	0	0
CER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ŏ	Ö	ő	Ö	Ö	ő	0	Õ	Ö	0	Õ	Ŏ	Ö	0
	50 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	100 ppm	1	1	ĭ	1	1	1	4	4	4	2	2	1	1	2
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
WOIII	25 ppm	0	0	0	0	0		0	. 0	0	-		0		
		0	-	0	0		0				0	0	•	0	0
	50 ppm		0			0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration	Week-day						
		99-7	100-7	101-7	102-7	103-7	104-7			
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	2			
	25 ppm	1	1	1	1	1	2			
	50 ppm	3	3	3	3	3	3			
	100 ppm	1	1	1	1	1	1			
M. POSTERIOR DORSUM	Control	0	0	1	1	1	0			
	25 ppm	1	0	0	0	0	0			
	50 ppm	0	1	1	1	1	1			
	100 ppm	1	2	2	2	2	2			
M. HINDLIMB	Control	0	. 0	0	0	0	0			
	25 ppm	0	0	0	0	0	1			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
M. GENITALIA	Control	1	1	1	1	1	2			
	25 ppm	0	. 0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
M. SCROTUM	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0		•	
ANEMIA	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
JAUNDICE	Control	0	0	0	0	0	0			
•	25 ppm	0	0	Ó	Ō	0	Ö			
	50 ppm	0	0	0	0	0	Ō			
	100 ppm	0	0	0	0	0	0			
ULCER	Control	0	1	1	1	1	1			
	25 ppm	0	0	0	0	0	0			
	50 ppm	1	1	1	1	1	1			
	100 ppm	1	1	2	2	2	2			
CRUSTA	Control	1	1	1	1	1	0			
	25 ppm	0	0	0	0	0	1			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
	roo bbm	v	U	U	U	U	V			

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

SEX : MALE															PAGE:
Clinical sign	Group Name		stration We	eek-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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I MORITALIO D	25 ppm	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	Ŏ	0	0	0	0	0	0	0	0	ő
	100 ppm	0	ő	Ö	0	Ö	0 .	o	Ö	ő	0	ő	ŏ	0	ŏ
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0 .	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : MALE

SEX : MALE															PAGE: 3
Clinical sign	Group Name	Admin	istration W	eek-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
HEMORRHAGE	Control	. 0	0	0	0	0	0	0	٥	0	0	0	0	0	0
ILMORITAGE	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	ő	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Ŏ	ő	ő	0	ő	0	0	0	0	0	0	0 .	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0 -	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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 SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	ō	Ö	Ŏ	Ö	ő	Ö	Ö	Ö	ŏ	0	Ů	Ö
	50 ppm	0	0	Ō	Ŏ	Ŏ	Ŏ	Ö	ŏ	Õ	Õ	Ŏ	Õ	Ō	Ö
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	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
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ō	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinian diam	Carrier W	47.		7 1 1											
Clinical sign	Group Name	Admini 29-7	istration W 30-7	/eek-day _ 31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
														71 1	72 (
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ō	0	Ö	0	Ŏ	Ŏ	Õ	Ö	Ŏ	Ö	Ŏ	Ŏ
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	Ō	0	Ŏ
	100 ppm	0	0	0	0	0	0	Ö	ō	Ō	Ö	0	Ö	Ö	ő
BNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0.	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
'ACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OOSE STOOL	Control	0 .	0	0	0	0	0 .	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	Ö	Ö	Ö	Ō
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	Ö	Ö	ō
	100 ppm	0	Ō	0	Ö	ō	Ō	Ō	Ö	ō	ő	Ö	Ö	ő	ő
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ō	0	ō	Ŏ	ő	Ô	Ö	o o	Ö	0	Ö	0	Ö	0
	50 ppm	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	ŏ	Ö	0.	ő	ő	0	0	0	0	0	0	0	0	0
SPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ō	0	ŏ	0	0	0	o O	0	0	0	0	0	0	0
	50 ppm	ő	0	ő	Ŏ	ŏ	Ŏ	ő	0	0	0	0	0	0	0
	100 ppm	ő	0	0	0	ő	0	0	0	0	0	0	0	0	0
ACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0					0					*
	50 ppm 100 ppm	0	0	0	0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0
BEP BREATHING	Camturi	٥	0	•	^	0	0	^	0	•	^	•	^	•	•
THE DISTRICTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ō	0
	100 ppm	0	Ö	Ō	Ö	Ö	0	Ö	Ŏ	o O	Ö	Ŏ	0	Ö	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration W	eek-dav											
ū		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
•															
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	Ō	Ö	Õ	Õ	0	0	0	0	0
	50 ppm	0	0	Ō	Ŏ	Ö	0	Ö	0	0	0	0			
	100 ppm	Ö	Ö	Ö	Ö	ő	0	0	0	0	0	0	0 0	0 0	0 0
BNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	^	0	0	•	•	•
	25 ppm	ő	0	0	0	0	0		0	0	0	0	0	0	0
				-			-	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ó	0
	50 ppm	0	0	0	0	0	0	0	. 0	0	Ō	Ö	Ŏ	ŏ	Ö
	100 ppm	0	0	0	0	Ö	0	ō	Ö	ő	Ô	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	Ō	Ö	Ŏ	Ö	Ŏ	0	0					
			0						-		0	0	0	0	0
	50 ppm 100 ppm	0	0	0	0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0
DECRITRATION COURTS ARVOR			_						•	ŭ	v	ŭ	v	v	v
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ō
'ACHYPNEA	Control	0	0	0	0,	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	ō	0	0	Ö	Ö	Ô	0	0	ő	0
	50 ppm	0	ō	Ŏ	Ö	ő	0	Ŏ	0	0	0	0			
	100 ppm	ő	ő	0	0	0	0	0	0	0	0	0	0 0	0 0	0
DEEP BREATHING	Control	0	0	0	0	^	0	•	0	0	•	•	•	_	
Similitino		0		-	0	0	0	0	0	0	0	0	0	0	0
	25 ppm		0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	Ō	Ö	Ŏ	Ŏ	ő	o O	0	0	Ŏ
	50 ppm	Ö	ŏ	0	0	0	0	0	0	0	0	0			-
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0
UBNORMAL TEMP	01	0	0		•		•	•	_	_	_				
ODNOMBLE TEME	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Group Name	Admini	stration W												
	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
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									-			0	0	0
									-			0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	1	0	0	0	0	0	0
												-	-	ő
										_	-		-	Ö
100 ppm	0	0	0	0	0	0	Ö	Ŏ	Ö	0	Ö	Ö	1	Ö
Control	n	n	n	. 0	٥	0	0	٥	0	٥	0	0	0	0
									-	-		-	-	0
									-					0
100 ppm	0	0	0	0	0	Ö	0	0	0	1	0	0	0	0
Control	n	0.	0	0	٥	0	0	٥	0	0	0	0	0	0
														0
														0
100 ppm	0	0	0	0	0	Ö	0	0	0	0	0	0	0	0
C->+1	0	0	0	•	0	•	^	^	^	^		A	•	^
			-						-	-	-			0
									-			-		0
									-					0 0
100 ppm	v	v	v	v	v	V	v	V	U		v	U	U	v
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm		0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0		0		1
100 ppm	0	0	0	0	0	0	Ō	0	Ō	0	0	0	ō	Ō
Control	0	0	0	0	0	0	0	0	0	n	n	O	0	0
	Ō	0	ŏ	Ö	Ö	Ŏ	0	0	0	0			0	ő
									-	-			_	0
														ő
	Control 25 ppm 50 ppm 100 ppm	Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 Control 0 25 ppm 0 50 ppm 0 Control 0 25 ppm 0 50 ppm 0	Control 0 0 25 ppm 0 0 50 ppm 0 0 100 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 25 ppm 0 0 50 ppm 0 0 Control 0 0 Control 0 0 25 ppm 0 0 Control 0 0	Control 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Control 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Control O O O O O O O O O	Control O O O O O O O O O	Control O O O O O O O O O	Control O	Control O O O O O O O O O	Control O O O O O O O O O	Control O	Control O O O O O O O O O	Control O O O O O O O O O

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

REFORT TITE - III I

SEX : MALE

SEX : MALE															PAGE: 3
Clinical sign	Group Name	Admin	istration V	Yeek-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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IIIMORIGIIOD	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	ŏ	0	0	0	Ö	0	0	0	0	0	0	0	0	Ö
	100 ppm	0	0	Ö	o	Ö	0	Ö	0	Ö	0	Ö	Ö	o	1
ABNORMAL TESTIS	Control	0	0	0	0	2	2	2	2	2	2	2	2	2	2
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	1	1	0	0	1	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0 0	0 0	0 1	0 1	0 0	0	0	0 0	0 1	0	0 1
DECENTRATION OF THE ADVAN													_		_
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0 0	0	0 0	0	0 0	0 0	0	0	0	0	0	0	0	0 0
	50 ppm 100 ppm	0	0	0	0 0	0	0	0 0	0						
TACHYPNEA	Control	0	0	0	0 .	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Õ	Ö	0	0	Ö	ŏ	Ö	Õ	ŏ	Ŏ	ŏ	Õ	ŏ
	50 ppm	0	0	Õ	Ŏ	Õ	Ö	Ŏ	Ö	ŏ	Ö	0	ŏ	Ŏ	Ö
	100 ppm	0	0	0	0	0	Ō	0	0	0	0	0	0	1	1
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	1	0	. 0	0	0
	50 ppm	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Admin	istration	Week-day					
	22 2 mp 1104110	99-7	100-7	101-7	102-7	103-7	104-7		
								<u> </u>	
HEMORRHAGE	Control	0	0	0	0	0	0		
	25 ppm	0	1	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
ABNORMAL TESTIS	Control	2	2	2	2	2	2		
IDIOIGE INSTITUTE	25 ppm	ő	ő	0	0	0	ő		
	50 ppm	ő	ő	0	0	ő	ő		
	100 ppm	ő	0	0	0	0	0		
	100 ppm	v	ŭ	·	·	v	v		
PROLAPSE OF PENIS	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	. 0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
IRREGULAR BREATHING	Control	0	0	0	1	0	1		
Valle Valle IIIIIV	25 ppm	Ö	0	0	0	0	0		
	50 ppm	Ő	ŏ	Õ	ő	ő	ő		
	100 ppm	Ö	ŏ	Ö	Ö	0	ő		
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
rachypnea	Control	0	0	0	0	0	0		
***************************************	25 ppm	0	0	0	0	0	Ô		
	50 ppm	0	ő	ő	ő	ŏ	0		
	100 ppm	o ·	ŏ	ő	ŏ	ő	0		
			_		_	_	_		
DEEP BREATHING	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
LOOSE STOOL	Control	0	0	0	0	0	0		
20022 21002	25 ppm	Ö	0	0	Q.	0	ő		
	50 ppm	ő	0	0	0	0	ő		
	100 ppm	Ö	Ö	ő	0	ő	ő		
SUBNORMAL TEMP	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		

APPENDIX C 2

CLINICAL OBSERVATION: FEMALE

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration We	ek-dav											
	or oup Ivanio	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	. 50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	Ó	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Ō	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ó	Ö	Ó	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	Ō	0	Ō	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Õ	ő	ō	Ö	0	Ō	0	0	ō	Ō	0	Ō	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ō	Ō	Ō	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	Ö	. 0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	Ō	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
	25 ppm	0	Ŏ	Ö	ŏ	Õ	ŏ	Ŏ	Ö	Ö	0	0	0	Ö	Ö
	50 ppm	0	ő	0	0	0	Ő	0	0	0	Ő	0	Õ	0	Ö
	100 ppm	0	ŏ	ő	ő	ő	ő	Ö	ő	ő	Ö	ŏ	o o	ő	ŏ
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ŏ	0	0	Ő	0	ő	0	0	0	0	0	Õ	0	ŏ
	50 ppm	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
	100 ppm	J	v	U	U	Ų	U	U	v	v	v	v	v	v	v

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
	25 ppm	Ö	ŏ	ŏ	Ö	ŏ	0	Ô	0	Ö	Ö	Ŏ	Ö	Ö	Ŏ
	50 ppm	Ö	ŏ	ŏ	Ö	ő	Ŏ	0	0	Ö	0	Ö	Ö	0	Ö
	100 ppm	Ö	Ö	0	ō	ő	ō	ő	ō	0	ő	ō	ő	ő	Ŏ
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0 .	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

linical sign	Group Name	Admini	istration W	eek-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
АТН	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A111	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	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
	100 ppm	U	U	U	U	U	U	U	U	U	U .	U	U	U	U
RIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	. 0	.0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0 .	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	Ô	0	0	0	0	0	0	0
	100 ppm	0	Ō	Ö	0	Ō	0	0	Ō	0	0	Ō	0	0	0
XIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ö	Ŏ	ō	0	Ō	Ö	Ō	0	0	Ō	. 0	0
	50 ppm	Õ	Ō	Ö	Ŏ	ŏ	Ö	Ŏ	Ö	Ö	Õ	0	Ŏ	Ö	0
	100 ppm	0	0	Ö	0	Ō	ŏ	ō	ő	o	0 .	0	o	0	Ŏ
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	ő
	50 ppm	ő	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	Ö	0	0	0	0	0	0	0	ő	0
TING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
.1110	· 25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	roo bbm	Ū	v	v	v	v	v	v	U	v	Ū	v	v	v	J
LED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
EATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	Ö	ō	Ö	ō	ŏ	Ŏ	Ö	Õ
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUNCHBACK POSITION	Control	0	0	0	0	0	0	0	٥	0	0	٥	٥	0	۸
TOTOLDHOM I OUT I TOT			0						0		0	0	0	0	0
	25 ppm	0		0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	Õ	Ō	Ö	Õ	0	Ö	Ö	0	ŏ	Õ	Ŏ	Ŏ	Õ	ő
	50 ppm	0	Ö	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0
PILOERECTION	Con+1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I LODINGO I TON	Control			-					-			-	•	-	
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : Al 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
PATH .	Control	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
****	25 ppm	ŏ	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1									-	-
	100 ppm	1	1	1	1	1 1	1 1	3 1							
RIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	Ó	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
AXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	1 0	1 0	1 0	0	0 0	0	0 0	0 0	0 0	0 0	0 0
STING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	ő	ő	0	0	0	Ö	Ö	Ö	Ö	Ů	Ö	Ö
	50 ppm	0	0	Ō	Ō	Ö	1	Ö	Ŏ	0	ō	0	ō	Õ	0
	100 ppm	0	0	0	0	Ō	ō	0	0	0	Ö	0	Ö	ō	Õ
ILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	0	0	0	0	0	0	Ó	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

linical sign	Group Name	Admini	stration W	eek-dav											
		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
eath	Ct1	0	0	0	0	0	,	1	1	•	1	3	9	9	3
CAID	Control	0	0	0	0	0 0	1 0	1 0	1 0	1 0	1 0	0	3 0	3 0	0
	25 ppm	0	-	-	0	· · · · · · · · · · · · · · · · · · ·	-	_	-						5
	50 ppm	3	3	3	3	3	3	3	4	4	4	4	4	5	
	100 ppm	1	1	2	2	2	2	2	2	3	3	3	3	3	3
RIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	. 0	0	0	0	0	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	25 ppm	ŏ	Ö	ō	Ö	Ö	Ŏ	ō	ō	0	0	Ō	0	0	. 0
	50 ppm	Ö	0	Ō	Ö	Ō	0	Ö	Ō	0	0	0	0	0	0
	100 ppm	Ō	Ö	Ō	Ŏ	0	0	Ō	0	Ō	0	0	0	0	0
AXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ö	ŏ	Ö	Ŏ	ŏ	0	0	0	0	Ô	0	0	0
	50 ppm	Ö	Ö	ő	Ö	Õ	ő	0	ő	Ö	Ö	0	Ö	. 0	0
	100 ppm	ő	ő	0	0	Ö	0	0	0	Ö	o O	0	0	Ö	ō
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
METTIC CHII	25 ppm	ő	Ö	0	0	0	0	Ŏ	0	0	Ő	0	0	0	0
	50 ppm	0	0	0	0	0	Ő	0	Ő	Õ	0	0	ő	ŏ	ŏ
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	ő
CTT1V	0 +1		•	0	0	•	•	^	0	0	0	0	0	0	0
STING	Control	0	0	0	0	0	0	0	0	-	0	0 0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0		•		
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILED	Control	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	Ŏ	Ö	0	Õ	0	Ō	0	0	0	0	0	0	0
	100 ppm	0	Ŏ	Ö	Ö	Ö	0	Ö	0	0	Ō	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

linical sign	Group Name	Admini	stration W	eek-dav											
		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
ATH	Control	4	4	4	4	4	4	4	4	4	4	E	F	E	r
DAIII				4	4	4	4	4	4	4	4	5	5	5	5
	25 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1_	1
	50 ppm	5	5	6	6	6	6	6	7	7	7	7	7	7	7
	100 ppm	3	3	3	3	3	3	3	3	3	3	3	4	5	5
DRIBUND SACRIFICE	Control	0	1	1	1	1	2	2	2	2	2	2	3	3	3
	25 ppm	0	0	0	0	0	0	0	2	2	2	2	2	2	2
	50 ppm	1	1	1	1	1	1	2	3	3	3	3	4	4	4
	100 ppm	0	0	0	0	1	1	1	2	2	2	2	2	2	3
COMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
NCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
AXIC GAIT	Control	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	Ô	0	0	0	Ō	0	0	1	1	0	0	0
	100 ppm	0	Ō	ō	0	0	ō	0	ō	ō	ō	ō	0	ŏ	ŏ
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	Ó	Ó	Ö	Õ	Ō	ō	ō	Ö	0
	50 ppm	0	Ō	0	0	Ō	Ö	Õ	Ō	Ö	Ö	Ö	Ŏ	Ŏ	Ŏ
	100 ppm	ō	ő	ŏ	ō	ō	0	0	Ö	0	Ö	Ö	0	Ö	0
STING	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	Ö	0	ŏ	0	Ŏ	0	Ŏ	0	0	0	Ö	Ô	Ô	0
	50 ppm	Ö	0	ő	Ö	0	Ö	Ö	1	1	1	1	0	0	1
	100 ppm	ō	ő	ő	o	ő	0	ő	0	0	0	0	ő	o	0
OILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
r una destination	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20 ppm 50 ppm	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
	100 ppm	U	υ	U	U	U	0	U	U	0	U	U	U	1	U
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	0	0	0	1	1	1	1	1	1	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admin	istration	Week-day			
		99-7	100-7	101-7	102-7	103-7	104-7
							
DEATH	Control	5	5	6	6	6	7
	25 ppm	1	2	2	3	3	3
	50 ppm	7	9	9	9	9	10
	100 ppm	б	6	6	6	6	6
MORIBUND SACRIFICE	Control	4	4	4	4	6	6
MORIDOND SACRIFICE	25 ppm	2	2	2	2	2	2
	50 ppm	4	4	4	4	4	4
	100 ppm	3	3	4	5	5	5
	100 ppm	J	ð	7	Ü	Ü	J
LOCOMOTOR MOVEMENT DECR	Control	0	0	1	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	1	1	1	1
ATAXIC GAIT	Control	0	0	0	0	0	0
AIDAIO VALI	25 ppm	0	0	0	0	0	0
	25 ppm 50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	100 ppm	•	J	•	v	•	•
PARALYTIC GAIT	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
			_			_	_
WASTING	Control	0	0	1	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	0	0	0	1
	100 ppm	1	1	2	1	1	2
SOILED	Control	0	0	0	0	0	0
DOTPEN	Control 25 ppm	0	0	0	0	0	0
	25 ppm 50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	too bhm	U	v	v	v	v	v
PILOERECTION	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	0	0	0	0
	100 ppm	1	1	1	1	1	1
	• •						

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : FEMALE

SEX : FEMALE															PAGE: 49
Clinical sign	Group Name	Admini	stration W	eek-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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	٥	•	^	•	^
THE OWN	25 ppm	0	0	0	0	0	0	0	0 0	0 0	0 0	0 0	0	0 0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0 0
	100 ppm	0	ŏ	ő	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm 100 ppm	0 0	0 0	0 0	0	1 0									
CATARACT	Control	0	0	0	^		•	•	•		^				
Offinition	25 ppm	0	. 0	0	0	0 0	0	0	0	0	0	0	0	0	0
	50 ppm	0	. 0	0	0	0	0	. 0	0 0	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0 0	1 0	1 0	1 0	1 0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	Ó	0	0	0	0	0	0
-	25 ppm	0	ō	Ŏ	0	ŏ	0	Ö	ŏ	ō	0	ő	0	0	0
	50 ppm	0	0	0	0	0	0	Ô	Ō	ō	Ö	Ö	Ö	Ö	Ö
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
RAUMA	Control	0	0	0	0	0	0	•	^	•	•	•	•	^	•
RAUMA	Control 25 ppm	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
	50 ppm 100 ppm	0	0 0	0	0	0	0 0	. 0	0 0	0 0	0 0	0 0	0 0	0	0 0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLLED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TARACT	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	25 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	50 ppm 100 ppm	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0
ONJUNCTIVAL EDEMA	Control	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
ONJONOTIVID EDEMAI	25 ppm	o	Ö	0	0	0	0	0	0	0	0	0	o	0	0
	50 ppm	ő	0	0	0	0	0	0	0	0	0	0	Ö	Ö	0
	100 ppm	ő	ő	Ö	ő	0	0	Ö	ő	0	Ö	ő	ő	ő	0
NTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	Ō	0	0	0	0	0	0
	100 ppm	0	0	0	ō	Ō	Ō	ō	Ō	0	0	Ō	0	0	0
DRNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	leek-day											
11111001 01811	or oup fidule	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
							 		<u> </u>						
RAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	Ö	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	Ō	0	0
	100 ppm	0	Ō	Ō	Ö	Õ	Ö	Ö	Ö	Ö	0	0	ő	Ö	ŏ
KOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	1	ĩ	1	ī	1	1	1	î	1	î	ī	i	ī	1
	100 ppm	Ō	0	ô	ō	Ō	, 0	ō	ō	ō	0	0	ō	ō	Ô
ATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	50 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ongonori ind indimir	25 ppm	Ö	Ö	0	0	0	0	0	0	0	Ö	0	0	0	0
	50 ppm	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	ő	0	0	0	Ö	0	0	0
NTERIOR CHAMBER OPACITY	Control	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ö	ő	0	0	0	Ö	Ö	0	0	0	0	Ö	Ô
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
												-			•
ORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
KTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	ŏ	Ö	Ŏ	Õ	Ö	Ŏ	ŏ	ŏ	Ö	Ŏ	Ŏ	Ö	ō

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

Clinical sign	Group Name	Admini	stration W	eek-day											
		43-7	44-7	45-7	46-7	47-7	487	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
PRAIDM	a . 1	•	•	•											
RAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	U	0	0	0	0	0	0	0	0	0	0	0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
DILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	, 0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	1	ī	1	1	ō
	100 ppm	Ō	0	0	0	Ö	0	ō	ō	ō	0	0	0	0	0
TARACT	Control	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	25 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	50 ppm	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	ō	0	0	0	0	0	0	0	0	0	0
ONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ō	ō	Ŏ	Ö	Ö	. 0	0	0	o o	Ö	Ö	Ŏ	Ö	ō
	50 ppm	Ö	ŏ	ŏ	Ö	Ö	0	Ö	0	Ö	0	0	ő	0	0
	100 ppm	0	0	Ö	ő	ő	ő	Ö	ő	ő	0	ő	ő	ő	Ŏ
VTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ŏ	Ö	Ö	Ö	0	0	0	Ö	0	0	Ö	0	0
	50 ppm	Ö	ĭ	1	i	1	i	0	0	0	0	Ŏ	ő	0	ő
	100 ppm	ő	0	0	Ō	0	Ō	ő	ő	Ö	Ö	ŏ	ő	ő	0
DRNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
VALUE DE LINE	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 hbm	U	v	U	U	U	U	U	U	U	v	U	v	U	v
TERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE: A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-dav											
		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
tauma	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHOMA	Control			0	0	0	0	0	0	0	0	0	0	0	0
	25. ppm	0	0												
	50 ppm 100 ppm	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
ROG BELLY	Control	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
DILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	25 ppm	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	50 ppm	2	2	2	2	2	3	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DRNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-dav											
		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
rauma	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ö	Ö	Ö	0	Ö	0	0	0	0	0	0	0	ő
	50 ppm	Ŏ	ŏ	Ŏ	Ö	Ö	Ö	0	0	0	0	Ö	0	0	0
	100 ppm	0	0	0	ō	0	Ö	ő	ő	ō	ő	0	ŏ	ŏ	ő
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	1	1	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XOPHTHALMOS	Control	0	1	1	1	1	1	1	2	2	2	1	1	1	1
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATARACT	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	25 ppm	4	4	4	4	4	4	4	4	4	4	4	4	5	5
	50 ppm 100 ppm	3 0	3 0	4 0	4 0	5 0	5 0	5 0							
ONITING THAT EDGIA	Control 1	0	0	0		^	•	•	•	•	•	•	•	•	
ONJUNCTIVAL EDEMA	Control	0	0	0	0 0	0 0	0	0 0	0	0	0	0	0	0	1
	25 ppm 50 ppm	0	0	0	0	0	0	0	0	0 0	0	0 0	0 0	0	0 0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	ŏ	Ö	Ö	Ö	0	Ô	0	0	0	0	0	0	0
	50 ppm	Õ	Ö	Ö	Ö	0	Ö	0	0	0	0	0	0	Ö	0
	100 ppm	0	ő	ō	ŏ	ő	o o	ő	o	ő	ő	ő	0	ő	0
ORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	25 ppm	Ō	Ō	Ŏ	Ŏ	Ö	Ŏ	0	Ö	Ö	Ō	Ö	0	Ö	Ô
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	ō	0	0
	50 ppm	0	0	0	0	0	1	1	2	1	1	2	2	1	1
	100 ppm	0	0	0	Ō	0	1	Ī	2	2	2	2	$\overline{2}$	2	2

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration V	reek-day											
	oroup rano	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
RAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ICIONE1	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0						
	100 ppm	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0 0	0 0	0 0
ROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ō	0	0	0	0	0	ō	Ō	Ő	ò	0	Ö	0	0
	50 ppm	1	í	1	í	i	2	2	1	1	1	1	Ö	1	1
	100 ppm	ō	ō	0	0	ō	0	0	0	0	ō	0	ő	ō	0
DILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	0	0	0	1	1	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
KOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	1	1	1	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TARACT	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	25 ppm	5	5	5	5	5	5	5	4	4	4	4	4	4	4
	50 ppm	5	5	5	6	6	6	6	6	6	6	6	6	6	6
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ONJUNCTIVAL EDEMA	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DRNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KTERNAL MASS	Control	2	3	3	3	3	3	3	3	3	4	3	3	3	3
	25 ppm	0	0	0	1	2	3	3	3	3	4	5	5	5	6
	50 ppm	1	1	1	1	1	1	1	0	0	1	2	2	2	2
	100 ppm	4	4	4	4	4	4	5	5	6	7	8	9	8	7

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admin	istration V	Veek-day				 		
	VI Out I Out	99-7	100-7	101-7	102-7	103-7	104-7		 	
					· · · · · · · · · · · · · · · · · · ·					
RAUMA	Control	1	1	1	1	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
ROG BELLY	Control	1	1	2	2	1	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	1	0	0	1	1	1			
	100 ppm	0	0	0	0	1	1			
OILED PERI-GENITALIA	Control	0	1	1	1	0	0			
	25 ppm	0	ō	ō	ō	ō	Ō			
	50 ppm	1	Ö	í	ŏ	ů	ő			
4	100 ppm	ō	1	1	ŏ	ő	Ö			
KOPHTHALMOS	Control	1	1	1	1	1	1			
101 111 111 111 111 111 111 111 111 111	25 ppm	ō	ō	Ō	ō	0	0			
	50 ppm	ő	Ő	ő	0	0	ő			
	100 ppm	0	ő	ō	0	Ö	0			
ATARACT	Control	3	3	4	4	4	4			
	25 ppm	4	4	4	4	4	4			
	50 ppm	6	5	5	5	5	5			
	100 ppm	ō	0	0	0	ő	0			
ONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0			
ONGONOTITIES EDERAL	25 ppm	ŏ	0	0	0	0	0			
	50 ppm	0	Ő	ő	ő	Ö	Ö			
	100 ppm	ő	0	0	0	0	0			
VIERIOR CHAMBER OPACITY	Control	1	1	1	1	1	1			
Organization of notifi	25 ppm	0	0	0	0	0	1 0			
	25 ppm 50 ppm	0	0	0						
	100 ppm	0	0	0	0 0	0	0 0			
			v	V	v	v	V			
DRNEAL EDEMA	Control	0	0	0	0	0	0			
	25 ppm	0	0	0	0	0	0			
	50 ppm	0	0	0	0	0	0			
	100 ppm	0	0	0	0	0	0			
KTERNAL MASS	Control	3	3	4	5	5	5			
	25 ppm	6	6	7	6	6	7			
	50 ppm	2	2	2	2	3	4			
	100 ppm	6	6	6	6	6	7			

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration We	ok-dov											
Timical Sign	oroup Name	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
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	°100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	Ö	0	0	0	ō
	50 ppm	0	0	0	0	0	0	0	Õ	0	Õ	Õ	Õ	Ö	Ö
	100 ppm	0	0	0	0	0	Ō	Ö	ō	ō	Ö	0	0	ő	0
PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	Ō	0	Ö	0	Ö	0	Ō	Ö	Õ
	50 ppm	0	0	Ō	Ö	Ö	Ŏ	Ŏ	0 -	0	Ŏ	Õ	Ö	Ö	0
	100 ppm	Ō	0	Ō	Ö	Ö	Ö	0	ŏ	ő	ő	ő	Ö	ő	ő
FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ō	ō	Ŏ	0	Ö	ŏ	Ö	Ö	Ö	0	0	0	0	ő
	50 ppm	0	0	0	0	0	Ō	0	0	Ö	Ō	0	ō	0	ō
	100 ppm	0	0	0	0	0	Ō	0	Õ	Ö	0	Ö	Ö	Ö	Ŏ
BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
ETERNAL MACO		•				•	•			_					
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
.PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	0	0	0	0	0	0	0	0	0	0	Ō	ō
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ō	0
	100 ppm	0	0	Ō	0	0	0	0	0	0	0	0	0	0	0
PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	Ŏ	Õ	Ö	0	Ö	0	Ö	Ö	0	0	Ö	Ô	ő
	50 ppm	Ŏ	Ö	Ö	0	0	o O	Ö	Ö	0	Ö	Ö	0	Ö	0
	100 ppm	ō	ő	Ö	0	0	Ö	0	o o	ő	Ö	Ö	0	ő	0
. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. I ONDETRIE	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. BREAST	01	0	0	^	0	^	0	^	•	^	^	•	•	^	^
I CMEMO I	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	Ō	0	0	0	0	0	Ö	0	0	0	0	0
	100 ppm	Ō	Ŏ	Ö	Ö	ō	Õ	Ö	0	Ö	0	Ö	ō	0	Ö

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : FEMALE

ODA · I DRINGE															PAGE:
Clinical sign	Group Name	Admini	stration W	eek-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
INTERNAL MASS	a . 1	•													
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	100 ppm	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
	25 ppm	0	0	0	Ô	Ō	Ŏ	Ŏ	Ö	ŏ	0	0	Ö	0	ő
	50 ppm	0	0	Ö	Ö	Ŏ	Ŏ	0	Ö	Õ	0	0	0	0	0
	100 ppm	0	Ō	Ō	Ö	Ö	0	0	0	0	ő	0	Ö	0	Ö
													Ť	Ť	
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	Ŏ	Ö	0	0	Ö	. 0	0	0	0	0	0	0	0
	50 ppm	0	Ö	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Ö	Ö	ő	Õ	0	0	0	0	0	0	0	0	0	0
										Ť	•	· ·	v	·	Ü
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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	^	•	
	25 ppm	Ö	0	0	0	0	0	0	0	0	0 0	0 0	0	0 0	0 0
	50 ppm	0	0	0	0	0	0	0	0	0					
	100 ppm	Ö	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0	0 0
									·	·	Ţ	· ·	v	·	v
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	٥	۸	^	^	0	•	^	•	•	•			_	_
III. ADDONILA	25 ppm	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
	50 ppm 100 ppm	0 0	0	0	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0
	100 իկա	v	V	U	U	U	U	U	U	U	U	U	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	Ō	Ö	0	0	Ö	Ō
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	Ō	Ō	Ō	Ŏ	0	Õ	Ö	Ö
	•						•	•	-	-	-	-	-	•	•

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX: FEMALE

														PAGE: 6
Group Name														
	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
Control	0	0	0	0	٥	n	٥	٥	0	٥	0	0	0	0
														0
														1
100 ppm	0	0	0	0	0	0	ō	ō	ō	ō	0	0	ō	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
						0		0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Control 25 ppm 50 ppm 100 ppm 100 ppm 100 ppm Control 25 ppm 50 ppm 100 ppm 100 ppm Control 25 ppm 50 ppm 100 ppm 100 ppm Control 25 ppm 50 ppm 100 ppm 100 ppm Control 25 ppm 50 ppm 100 ppm	Control 0 25 ppm 0 50 ppm 1 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0 Control 0 25 ppm 0 50 ppm 0 100 ppm 0	Control 0 0 0 25 ppm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Control 0 0 0 0 0 0 50 ppm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Control 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Control 0	Control O O O O O O O O O	Control O O O O O O O O O	Control O O O O O O O O O	Control O O O O O O O O O	Control O O O O O O O O O	Control O O O O O O O O O	Control O O O O O O O O O	Control 0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : FEMALE

															PAGE :
Clinical sign	Group Name		istration V												
		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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	Ö	0	0	0	0	0	0	0	0	0	0	0	0 0
	50 ppm	1	1	1	1	i	1	1	1	1	1	1	1	1	1
	100 ppm	0	ō	Ō	0	ō	Ō	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	· 100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Ö	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0 0	0 0	0 0	0 0	0 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					
m. DREMOT	25 ppm	0	0	0	0 0	0 0	0 0	0 0	0	0	0 0	0	0 0	0 0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	100 ppm	ő	ő	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	o	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	ő	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	ő	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0535 ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	ek-dav _											
		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
								"							
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	100 ppm	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ЕУЕ	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0 .	0	0	Ō	0	0	0	Ŏ	0
	50 ppm	0	0	0	0	0	0	0	Ō	Ŏ	ŏ	Ö	Ö	ŏ	0
	100 ppm	ō	ō	ő	ŏ	ő	ŏ	ő	o	0	0	0	0	0	0
PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ō	Ō	ō	Ö	Ö	Ö	Ö	Õ	ő	Ŏ	Ö	0	0	0
	50 ppm	Õ	Ö	Ö	0	0	ő	Ŏ	1	0	0	0	0	0	0
	100 ppm	ő	ő	0	0	0	0	0	0	0	0	0	0	0	0
PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	ő	0	0	Ô	Õ	Ö	Õ	0	0	0	0	0	0	0
	50 ppm	ŏ	0	Ö	0	0	0	0	0	0	0	0	0	0	
	100 ppm	o	0	ō	0	ō	0	0	0	0	0	0	0	0	0
FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Õ	Ŏ	0	Õ	0	0	Ŏ	Ő	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0		
•	100 ppm	0	Ô	0	0	0	0	0	0	0	0	0	0	0 0	0
BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	,
	25 ppm	Ő	0	0	0	0	0	0	0	0		0	0	1	1
	23 ppm 50 ppm	0		0							0		-	0	0
			0		0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0 .	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR, DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ô
	100 ppm	0	0	0	0	0	0	0	0	ō	0	0	0	Ö	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-dav											
	· · · · · · · · · · · · · · · · · · ·	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
NTERNAL MASS	Control	0	0	0	0	0	0			•		•	•		
MIEMAL MASS					0	0	-	0	0	0	0	0	0	1	3
	25 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	50 ppm	2	2	1	1	2	3	2	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	2
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
. EYE	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	Ö	Ô	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	Ô	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEDT MOUTH		^	^	•	•	•	•	•	•	•	•	_	•		_
. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0.	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ö	0	ő	0	Ö	0	0	0	0	0	0	0	0	0
	50 ppm	Ö	Ö	Ö	ŏ	ŏ	ŏ	ő	0	ŏ	0	0	Ö	0	ő
	100 ppm	ő	ő	ŏ	ő	ŏ	0	ő	ő	ŏ	ő	0	1	1	ő
. BREAST	C41	1		1	•	1	•		4	4		^	0	^	^
ו מעמווע .	Control	1	1	1	1	1	1	1	1	1	1	0	-	0	0
	25 ppm	0	0	0	1	1	2	2	2	2	3	3	3	3	3
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	2	2	3	3	3	3
. ABDOMEN	Control	0	0	0	0	0	1	1	1	1	2	2	2	2	2
	25 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	2
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppili	v	v	U	v	U	v	v	v	v	v	U	v	v	J

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

								 · · ··· ·- · · · ·	
linical sign	Group Name	Admin 99-7	istration 100-7	Week-day _ 101-7	102-7	103-7	104-7	 	
		99-7	100-7	101-7	102-1	103-7	104-7	 	
NTERNAL MASS	Control	2	2	2	2	1	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	1	1	2	2	2	2		
	100 ppm	2	2	2	1	1	1		
. NOSE	Control	0	0	0	0	0	0		
	25 ppm	ŏ	0	Ö	Ō	0	Ö		
	50 ppm	ō	Ö	Ö	Ö	0	Ö		
	100 ppm	1	1	1	1	1	1		
	100 ppm	1	1	1	1	1	ı		
. EYE	Control	1	1	1	1	1	1		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
.PERI-MOUTH	Control	0	0	0	1	1	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
I. PERI EAR	Control	0	0	0	0	0	0		
STERL EM	25 ppm	0	ő	. 0	0	0	ő		
	50 ppm	0	Ō	0	0	0	0		
			0	0	0				
	100 ppm	0	U	U	U	0	0		
. FORELIMB	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
. BREAST	Control	0	0	1	1	1	1		
	25 ppm	3	2	3	3	3	3		
	50 ppm	1	1	1	1	1	1		
	30 ppm 100 ppm	3	3	4	4	4	4		
, ADDOLEN					•	•			
I. ABDOMEN	Control	2	2	2	2	2	3		
	25 ppm	2	3	3	2	2	3		
	50 ppm	1	1	1	1	1	2		
	100 ppm	1	1	1	1	1	3		
. ANTERIOR. DORSUM	Control	0	0	0	0	0	0		
	25 ppm	1	1	1	1	1	1		
	50 ppm	ō	Ō	ō	ō	ō	ō		
	100 ppm	0	0	0	0	0	0		

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX: FEMALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX: FEMALE															PAGE: 0
Clinical sign	Group Name	Admini	stration W	eek-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
. GENTTALIA	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö
	100 ppm	0	ő	ő	Ö	Ö	Ö	ő	ő	0	0	ő	0	ő	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	U
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0 -	0	0
	50 ppm 100 ppm	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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGOLAR BREATHING	. 25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ŏ	Ö
	. 23 ppm 50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö
	100 ppm	0	0	0	0	0	0	ő	0	0	Ö	ō	ő	o o	Ö
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	Ο.	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE															PAGE: 66
Clinical sign	Group Name	Admini	stration W	eek-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	n	0	0	n	0	n	n	n	n	n	n
M. ODATINGIA	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ŏ
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M. GENITALIA	Control 25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50 ppm 100 ppm	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	
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MADINIA	25 ppm	0	0	0	0	0	0	0	0	0	0	0	Ô	Ô	Ö	
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	U	v	U	U	U	U	v	U	U	Ū	V	V	v	V	
JAUNDICE	Control	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	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	
III.MORIGIAGE	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ô	0	
	тоо ррш	U	V	U	U	U	v	U	U	U	U	V	V	V	V	
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ALDI HATORI DOURD ILBROR	25 ppm	ŏ	Ŏ	Ŏ	Õ	0	Ö	0	0	Ō	0	0	0	0	0	
	50 ppm	Ö	Õ	Ö	0	Ö	0	0	0	0	0	0	0	0	0	
	100 ppm	0	ŏ	Ö	Õ	0	0	0	0	0	0	0	0	0	0	
	211 Pp	•	•	•	•	•										
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	25 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DEEL DARATHING	25 ppm	Ö	0	0	0	0	0	0	0	0	0	ő	0	Ŏ	Ŏ	
	25 ppm 50 ppm	0	0	0	0	0	0	0	0	Ô	0	.0	0	Ô	Õ	
		0	0	0	0	0	0	0	0	0	0	0	0	ů	0	
	100 ppm	U	U	U	U	U	U	v	v	U	U	v	V		v	
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

REPORT TIPE - AT 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

linical sign	Group Name	Admini	stration We	ek-dav											
		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
ODNITO A TA	0 . 1		•	•		۰	•	•		•		2	•	•	•
. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	ō	ō	0	Ö	0	0	0	0	0	0	0	0
SPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
or right out booth intox	25 ppm	Ö	Ö	Ö	Ö	ő	0	0	Ö	Ö	0	ŏ	0	Ö	Ö
	50 ppm	0	Ö	Ö	0	ő	0	Ö	Ö	Ö	0	ő	Ö	Ö	0
	100 ppm	0	0	0	Ö	ő	0	0	0	0	0	0	0	ő	0
ADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0
	25 ppm 50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	roo hbu	Ū	Ū	U	U	v	v	v	v	v	U	v	V	v	v
EP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	istration V	Veek-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
I. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ö	Õ
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0.	0	0	0	0	1	0
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0 .	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0 0	0	0	0	0	0 0	0	0	0	0	0 0	0	0 0
	100 ppm	U	U	U	U	0	U	U	0	0	U	0	U	U	U
RADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
GENITALIA	Control	0	0	0	0	0	0		•	•	٥	•		•	
. OLNITALIA	25 ppm	0	0	0	0 0	0	0 0	0	0	0	0	0	0	0	0
			-					-	0	0	0	0	0	0	0
	50 ppm	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	U	U	0	0	0	0	0	0	. 0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	Ô	Ö	Ö	0	Ō	Ŏ	0	ō	0	Ö	ŏ	Ŏ
	50 ppm	0	- 0	Ó	0	0	0	0	0	0	Ō	Ö	Õ	ŏ	Ö
	100 ppm	0	0	Ō	0	0	0	0	ō	ō	0	1	0	Ö	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ō	Ŏ	ő	Ö	Ö	0	Ö	Ö	Õ	Ö	ů	0	0	ő
	50 ppm	Ö	Ö	ŏ	1	1	1	Ŏ	0	0	0	0	0	0	0
	100 ppm	0	ŏ	Ö	0	0	0	ő	ő	0	ő	0	Ö	ő	ŏ
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDITION DOORD INNOK	25 ppm	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm 50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	23 ppm 50 ppm	0	0	0	0	0	0	0	0		0	0	0	0	-
	100 ppm	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0
DED DESATUTIVO	<u> </u>	^	^	•	•	•	•	•	•	•	-	•	-	_	
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. 02.11	25 ppm	Ŏ	0	0	0	0	0	Ö	0	0	0	0	0	0	0
	50 ppm	Ö	0	0	Ö	0	1	1	1	1	1	2	2	1	1
	100 ppm	ō	0	0	ő	ō	1	i	1	1	1	1	1	1	1
NEMIA	Control	0	0	0	1	1	0	0	0	0	0	0	0	0	1
•	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	1 0	1 0	0 0	0
IRREGULAR BREATHING	Control	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0 -	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0 -	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY) ALL ANIMALS

SEX: FEMALE

Clinical sign	Group Name	Admini	stration We	eek-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	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1 -	1	1	1	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	2	2	2	1	1
NEMIA	Control	1	1	1	1	1	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	100 ppm	1	1	1	2	1	1	1	1	2	2	2	1	1	1
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	25 ppm	0	Ö	ő	0	0	0	0	0	Õ	0	0	Ö	Ŏ	Ö
	50 ppm	0	0	0	0	Ő	0	1	0	0	0	0	Ö	0	0
	100 ppm	Ö	Ö	ő	0	Ö	Ö	1	0	Ö	0	0	ŏ	ő	1
HEMORRHAGE	Control	1	1	1	0	0	1	0	0	0	0	0	0	0	0
DMOIGHTOD	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	ő
	50 ppm	0	0	0	0	0	0	0	0		0	0	0	0	
	100 ppm	0	0	0	0	0	0	0	0	0 0	0	0	. 0	0	0 0
IRREGULAR BREATHING	C+1	0	0	^	0	•	^	^	^	^	0	0	^	•	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm 100 ppm	0	0	0	0 1	0 0	1 0	1 0	0	0	0 0	0 0	0 1	0 1	1 0
270277.4021.0027				_											
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	Ô	0	0	0
	100 ppm	Ō	0	0	Ō	0	0	0	0	Ō	0	0	Ō	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	Ō	ō	Ŏ	ō	0	Ŏ	o O	ŏ	õ	ō	0	ŏ	ŏ	ő
	50 ppm	Ŏ	o ·	0	0	Ö	1	1	0	Õ	0	Ŏ	ő	0	ő
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admin	istration	Week-day					
	aroup rome	99-7	100-7	101-7	102-7	103-7	104-7		
M. GENITALIA	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	1		
	100 ppm	1	1	0	0	0	0		
ANEMIA	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	1		
	100 ppm	1	2	1	Ŏ	Ō	î		
JAUNDICE	Control	0	0	0	0	0	0		
J. M.	25 ppm	0	0	0	0	0	0		
	50 ppm	0	Ŏ	0	1	1	1		
	100 ppm	0	0	0	0	0	0		
			_						
HEMORRHAGE	Control	0	0	1	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	1	0	1	0	0	0		
	100 ppm	0	0	0	0	1	1		
IRREGULAR BREATHING	Control	0	0	0	1	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	1	0	0	0	0	0		
	100 ppm	0	0	0	0	0	0		
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0		
The state of the s	25 ppm	0	0	0	0	Ŏ	0		
	50 ppm	Ö	0	0	0	0	0		
	100 ppm	ŏ	ŏ	ŏ	Ŏ	ŏ	Ö		
DD A DVDATE A	0	•	^	•	•	^	•		
BRADYPNEA	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0 0	0	0	0		
	100 ppm	0	U	U	0	0	0		
DEEP BREATHING	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	1	1	1		
BROWN URINE	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	Ö		
	50 ppm	0	Ö	ő	Ö	0	0		
	100 ppm	ŏ	0	0	0	0	ő		
		•	-	•	-	-	-		
								Ÿ	

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE PAGE: 73

Clinical sign	Group Name	Admini	stration We	eek-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
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	n	0	0	0	0
	25 ppm	ŏ	ŏ	Ö	ō	Ö	0	Ö	ŏ	Ö	Ŏ	ő	ő	ő	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190) BAIS 4

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	n	0	0		0	0	0
	25 ppm	ő	o O	0	0	0	0	0	0	0	0	0	n	0	0
	50 ppm	0	0	0	0	0	0	Ō	0	Ö	Ö	ő	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE: 75

Clinical sign	Group Name	Admini	stration \	eek-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
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	n
	25 ppm	0	0	0	0	0	0	0	0	Ŏ	Ŏ	Õ	Ö	ŏ	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE: 76

Clinical sign	Group Name	Admini	stration W	eek-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
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	n	n
	25 ppm	0	0	Ö	Ō	Ō	Ŏ	ŏ	ŏ	ŏ	Ŏ	0	0	Ô	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE: 77

Clinical sign	Group Name	Admini	stration W	eek-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
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	Ö	0	0	ō	ŏ	ŏ	ő	ŏ	Ö	Õ	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	leek-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
SUBNORMAL TEMP	Control	0	0	0	0	n	0	0	n	0	0	0	0	0	0
	25 ppm	0	Õ	Õ	Ö	0	Ö	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	Ö	Ö	ő
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tov ppm			v	v	v	V		Ū	V	Ū	v	U	U	
(HAN190)															

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
VIDVORVAL MELO				_	_										
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	U	0	Ū	0	0	0	U	Ü	Ü	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(HAN190)															

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Admin	istration '	Week-day _					
		99-7	100-7	101-7	102-7	103-7	104-7		
SUBNORMAL TEMP	Control	0	0	0	0	0	0		
	25 ppm	0	0	0	0	0	0		
	50 ppm	0	0	0	0	0	0		
	100 ppm	0	0	0	0	. 0	0		
(HAN190)							· · · · · · · · · · · · · · · · · · ·	<u> </u>	BAI

APPENDIX D 1

BODY WEIGHT CHANGES: MALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

PAGE: 1

Name	Admini	stration	week-day											
	0-0		1-7		2-7		3-7		4-7		5-7		6-7	
Control	122±	5	151±	6	182±	8	206±	10	225±	10	243±	12	259±	12
25 ppm	122±	5	150±	7	181±	8	205生	9	226±	10	242±	11	256±	11
50 ppm	122±	5	150±	7	181±	9	205±	10	225±	10	243±	11	257±	12
100 ppm	121±	5	146生	9**	170±	9 * *	190±	11**	209±	12**	227±	13**	238±	14**

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

REPORT TYPE : A1 104

SEX : MALE

PAGE: 2

Name	Administ	tration	week-day											
	7-7		8-7		9-7		10-7		11-7		12-7		13-7	
Control	271± 1	13	284±	13	294±	14	302±	15	310±	16	316±	15	321±	16
25 ppm	268± 1	12	282±	14	292±	14	300±	14	307±	14	313±	15	319±	15
50 ppm	270± 1	13	282±	14	292±	14	301±	14	309±	14	314±	15	321±	15
100 ppm	250± 1	16**	261±	16**	270±	16**	277±	17**	286±	17**	291±	17**	297±	17**

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

REPORT TYPE : A1 104

SEX : MALE

PAGE: 3

	Admin	istration	week-day								*****			
	17-7		21-7		25-7		29-7		33-7		37-7		41-7	
Control	341±	16	356±	18	368±	20	381±	21	390±	23	391±	24	385±	23
25 ppm	334±	19	352±	18	364±	19	376±	21	386±	25	388±	23	383±	22
50 mgg 50	340±	16	353±	16	366±	18	376±	19	386±	21	388±	20	383±	19
100 ppm	315±	17**	329±	17**	342±	16**	351±	18**	359±	22**	362±	21**	358±	22**

(HAN260)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

PAGE: 4

Group Name Administration week-day_ 45-7 49-7 53-7 54-7 58-7 62-7 66-7 Control 395± 25 409± 26 416± 27 416± 27 418± 29 423 ± 28 425 ± 28 25 ppm 392± 25 405生 27 410± 25 411± 26 415± 26 418± 26 420± 26 50 ppm 392± 21 405± 21 411± 22 412± 22 $416\pm$ 22 417± 23 418± 22 100 ppm 367± 21** 379± 23** 385± 24** 386± 24** 389± 24** 393± 23** 394± 24**

Significant difference; $*: P \leq 0.05$

**: $P \leq 0.01$

Test of Dunnett

(HAN260)

BODY WEIGHT CHANGES

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

ALL ANIMALS

(SUMMARY)

REPORT TYPE : A1 104

SEX : MALE

PAGE: 5

oup Name	Admin	istration	week-day											
	70-7		74-7		78-7		82-7		86-7		90-7		94-7	
Control	428±	29	430±	28	430±	26	428±	26	427±	26	425±	26	421±	25
VVII.V2-V2	150—		100 =	20	200_		100-		25. —	50	150-	20	202	LU
25 ppm	423±	27	426±	27	425±	27	422±	27	422±	33	420±	47	422±	56
50 ppm	420±	21	422±	19	420±	22	415±	29	418±	19	417±	20	413±	21
100 ррт	398±	26**	401±	25**	402±	24**	399±	27**	399±	27**	395±	31**	390±	31**
Significant difference	; *: P≦	0.05 *	r*: P ≦ 0.(01			Test of D	unnett						

(HAN260)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

PAGE: 6

p Name	Administration v	veek-day			
	98-7	102-7	104-7		
Control	416± 27	412± 33	408± 32		
25 ppm	414± 24	410± 24	406± 25		
50 ppm	407± 22	400± 27	395± 28		
100 ppm	383± 31**	382± 27**	377± 28**		
Significant differenc	e; *: P ≤ 0.05 *	*: P ≤ 0.01		Test of Dunnett	

(HAN260)

APPENDIX D 2

BODY WEIGHT CHANGES: FEMALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

UNIT : g
REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 7

ip Name	Administration	week-day					
	0-0	1–7	2-7	3–7	4-7	5–7	6-7
Control	95± 3	109± 4	123± 5	132± 5	140± 6	148± 7	154± 8
25 ррш	95± 3	109± 5	123± 6	133± 7	142± 7	148± 8	155± 8
50 ppm	95± 3	109± 5	123± 6	132± 7	141± 8	148± 9	154± 9
100 ppm	95± 3	108± 4	120± 5*	129± 6	138± 7	146± 7	150± 8 *
Significant difference	e; *: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			

(HAN260)

BODY WEIGHT CHANGES

(SUMMARY)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

ALL ANIMALS

UNIT : g

REPORT TYPE : A1 104

SEX: FEMALE

PAGE: 8

Control 157 \pm 9 162 \pm 9 166 \pm 9 170 \pm 9 174 \pm 9 25 ppm 159 \pm 9 164 \pm 10 170 \pm 11 173 \pm 11 177 \pm 11 50 ppm 158 \pm 10 162 \pm 11 166 \pm 11 169 \pm 11 173 \pm 11 173 \pm 11 170 ppm 155 \pm 8 160 \pm 9 164 \pm 9 167 \pm 9 171 \pm 10 Significant difference; *: P \leq 0.05 **: P \leq 0.01 Test of Dunnett			
25 ppm 159± 9 164± 10 170± 11 173± 11 177± 11 50 ppm 158± 10 162± 11 166± 11 169± 11 173± 11 100 ppm 155± 8 160± 9 164± 9 167± 9 171± 10	12-7	11-7	13-7
50 ppm 158± 10 162± 11 166± 11 169± 11 173± 11 100 ppm 155± 8 160± 9 164± 9 167± 9 171± 10	176± 10	174±	78± 10
100 ppm 155± 8 160± 9 164± 9 167± 9 171± 10	178± 10	177± 1	82± 10
	176± 12	173± 1	79± 12
gnificant difference : * 'P < 0.05	173± 10	171± 1	76± 10
ignificant difference: * ' D < 0.05			
rganiteant difference, F. 1 = 0.00 FT. 1 = 0.01 lest of buildett			

(HAN260)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 9

Name	Administration	week-day					
	17-7	21-7	25-7	29-7	33-7	37-7	41-7
Control	186± 10	190± 11	196± 12	199± 11	200± 11	209± 12	213± 13
25 ppm	190± 12	194± 12	200± 12	203± 13	202± 13	212± 14	216± 14
50 ppm	188± 13	190± 13	195± 14	197± 13	197± 12	207± 13	210± 15
100 ppm	183± 9	188± 10	194± 10	197± 11	195± 10	206± 10	210± 12
gnificant difference	e; *: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			

(HAN260)

ANIMAL : RAT F344/DuCrlCr1j[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 10

up Name	Administration	week-day					
	45-7	49-7	53-7	54-7	58–7	62-7	66-7
Control	215± 13	218± 13	221± 14	221± 14	224 ± 15	228± 15	233± 17
25 ppm	219± 14	222± 15	225± 16	226± 16	230± 16	236± 18*	241± 19
50 ppm	212± 15	215± 15	219± 15	219± 14	221± 14	224± 18	228± 17
100 ppm	212± 12	215± 13	217± 13	217± 13	221± 13	225± 14	228± 15
Significant differenc	ce; *: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

UNIT : g

REPORT TYPE : A1 104

PAGE: 11 SEX : FEMALE

ip Name		orrarion,	n week-day									
 	70-7		74-7	78-7	82-7	·	86-7		90-7	. <u></u>	94-7	
Control	238±	18	243± 20	246± 21	249±	22	253±	22	257±	23	259±	24
25 ppm	246土	21	250± 22	254± 22	257±	23	260±	24	264±	25	268±	25
50 ppm	233±	19	238± 20	243± 20	245±	21	249±	23	254±	28	254±	30
100 ppm	234±	15	239± 16	244± 17	246±	17	250±	17	253±	18	255±	21
												-
Significant difference	; *: P ≤ 0). 05	**: P ≤ 0.01		Test of Dur	nnett						

(HAN260)

BODY WEIGHT CHANGES

(SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

ALL ANIMALS

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 12

oup Name	Administration	week-day			
	98-7	102-7	104-7		
Control	257± 27	258± 28	259± 21		
25 ppm	269± 27	272± 27	271± 28		
50 ppm	260± 23	261± 26	259± 27		
100 ppm	254± 24	257± 27	256± 25		
	· · · · · · · · · · · · · · · · · · ·				
Significant difference	e; *: P ≦ 0.05	**: P ≤ 0.01		Test of Dunnett	

(HAN260)

APPENDIX E 1

FOOD CONSUMPTION CHANGES: MALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

UNIT : g REPORT TYPE : A1 104

SEX : MALE

PAGE: 1

Group Name	Administration	week-day(effective)					
	1-7 (4)	2-7(7)	3-7(7)	4-7(7)	5–7 (7)	6-7 (7)	7-7 (7)
Control	14.4± 0.9	15.7± 1.1	16.8± 1.2	16.9± 1.2	16.9± 1.2	16.6± 1.1	16.7± 1.0
25 ppm	14.3± 0.9	15.7± 1.0	16.9± 1.1	16.7± 1.0	16.9± 0.9	16.4± 0.9	16.5± 1.1
50 ppm	14.1± 1.1	15.4± 1.3	16.6± 1.1	16.7± 1.1	17.0± 1.0	16.6± 1.0	16.3± 1.2
100 ppm	13.2± 1.3**	13.9± 1.0**	14.8± 1.0**	15.5± 0.9**	16.4± 0.9*	15.4土 1.0**	15.0± 1.1**

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

Test of Dunnett

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

REPORT TYPE : A1 104

SEX : MALE

PAGE: 2

up Name	Administration 8-7(7)	week-day(effective) 9-7(7)	10-7 (7)	11-7 (7)	12-7 (7)	13-7 (7)	17-7 (7)
Control	17.2± 1.0	16.9± 1.2	16.9± 1.1	16.4± 1.1	16.1± 0.9	15.9± 0.9	16.0± 1.1
25 ppm	17.3± 1.0	16.8± 1.1	16.8± 0.9	16.2± 1.1	15.9± 1.0	15.7± 1.0	15.5± 1.4
50 ppm	16.9± 1.0	16.7± 1.1	16.8± 1.0	16.4± 1.0	16.2± 1.1	16.0± 0.9	15.9± 1.0
100 ppm	15.9± 1.1**	15.5± 1.2**	15.9± 1.0**	15.5± 1.0**	15.3± 1.1**	15.0± 1.0**	15.2± 1.0**

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

UNIT : g
REPORT TYPE : A1 104

SEX : MALE

up Name	Administration 21-7(7)	week-day(effective) 25-7(7)	29-7 (7)	33-7 (7)	37-7 (7)	41-7(7)	45-7 (7)
Control	16.3± 1.1	16.0± 1.1	16.6± 1.2	16.4± 1.2	15.4± 1.0	15.7± 1.1	15.7± 1.5
25 ppm	16.0± 0.9	15.8± 1.1	16.5± 1.2	16.3± 1.2	15.0± 0.9	15.6± 1.1	15.9± 1.2
50 ppm.	16.0± 0.8	15.7± 1.0	16.4± 1.1	16.2± 1.0	15.5± 1.0	15.6± 0.9	15.6± 1.0
100 ppm	15.3± 1.0**	15.3± 0.9 **	15.8± 1.1**	15.2± 1.2**	15.0± 0.9*	15.3± 1.1	15.0± 1.0**
Significant difference;	*: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			
N260)		<u> </u>					

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

PAGE: 4

roup Name	Administration	week-day(effective)					
	50-7 (7)	53-7 (7)	54-7 (7)	58-7 (7)	62-7 (7)	66-7(7)	70-7 (7)
Control	16.5± 1.0	16.5± 0.9	16.5± 1.0	16.2± 1.1	17.1± 0.9	16.9± 0.9	17.2± 1.0
25 ppm	16.4± 1.2	16.5± 1.1	16.4± 1.1	16.3± 0.9	16.9± 1.2	16.8± 1.1	17.0± 1.1
50 ppm	16.3± 0.9	16.1± 0.9	16.2± 1.1	16.3± 0.8	16.6± 1.1	16.6± 1.1	17.0± 1.0
100 ppm	15.5± 1.0**	15.8± 0.9**	15.9± 0.9**	15.7± 1.1*	16.3± 1.0**	16.1± 0.9**	16.6± 1.1

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

Test of Dunnett

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

UNIT : g
REPORT TYPE : A1 104

SEX : MALE

PAGE: 5

up Name	Administration	week-day(effective)_					
	74-7 (7)	78-7 (7)	82-7 (7)	86-7(7)	90-7 (7)	94-7(7)	98-7 (7)
Control	16.7± 1.1	16.7± 1.4	16.3± 1.0	16.6± 1.1	16.2± 1.2	16.3± 1.2	16.5± 1.3
25 ppm	16.5± 1.1	16.4± 1.1	16.1± 1.0	16.3± 1.9	16.3± 2.1	16.4± 2.8	16.7± 1.3
50 ppm	16.5± 0.9	16.6± 1.1	16.1± 1.9	16.7± 1.0	16.8± 1.2*	16.7± 1.1	16.9± 1.5
100 ppm	16.1± 1.3	16.4± 1.3	15.9± 1.3	16.2± 1.0	15.9± 1.5	15.4± 1.9*	15.5± 2.4
Significant difference	*: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			

(HAN260)

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

REPORT TYPE : A1 104

EX : MALE				PAGE :
oup Name	Administrati 102-7(7)	ion week-day(effective) 104-7(7)	·	
Control	16.5± 2.1	16.5± 2.2		
25 ppm	16.7± 1.2	16.7± 1.3		
50 ppm	16.4± 2.0	16.9± 2.1		
100 ppm	16.2± 1.7	15.9± 1.2*		
Significant difference;	*: P ≤ 0.05	**: P ≤ 0.01	Test of Dunnett	
HAN260)				BAIS

APPENDIX E 2

FOOD CONSUMPTION CHANGES: FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 7

ıp Name	Administration 1-7(4)	week-day(effective) 2-7(7)	3-7(7)	4-7(7)	5-7 (7)	6-7(7)	7-7 (7)
Control	10.5± 0.6	11.0± 0.8	11.0± 0.7	11.2± 0.8	11.5± 0.9	11.1± 1.0	10.8± 0.9
25 ppm	10.2± 0.7*	11.1± 0.8	11.3± 0.8	11.4± 0.7	11.6± 0.8	11.2± 0.9	11.3± 1.0*
50 ppm	10.1± 0.7**	11.0± 0.9	11.0± 0.8	11.3± 0.9	11.7± 1.0	10.9± 0.7	10.9± 1.0
100 ppm	10.0± 0.7**	10.5± 0.8**	10.9± 0.7	11.1± 0.8	11.8± 0.9	10.6± 0.9*	10.7± 0.9

(HAN260)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

UNIT : g REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 8

Group Name	Administratio 8-7(7)	n week-day(effective) 9-7(7)	10-7(7)	11-7 (7)	12-7(7)	13-7 (7)	17-7 (7)
Control	10.9± 1.5	10.9± 0.9	10.7± 0.7	11.0± 0.9	10.4± 0.8	10.7± 0.7	10.9± 0.7
25 ppm	10.9± 1.0	11.5± 1.4*	11.1± 1.2	11.2± 0.8	10.5± 0.8	11.3± 1.1*	11.2± 1.3
50 ppm	10.7± 0.9	10.9± 1.1	10.8± 0.9	10.8± 0.9	10.6± 0.9	11.0± 1.0	11.0± 1.0
100 ppm	10.6± 0.9	10.8± 0.9	10.4± 0.9	11.0± 1.2	10.4± 0.9	10.7± 1.0	10.7± 0.9
Significant difference	$*: P \leq 0.05$	**: $P \leq 0.01$		Test of Dunnett			

(HAN260)

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

UNIT : g
REPORT TYPE : A1 104

SEX : FEMALE

oup Name	Administratio 21-7(7)	n week-day(effective) 25-7(7)	29-7(7)	33-7 (7)	37-7(7)	41-7(7)	45-7 (7)
							
Control	10.4± 0.8	11.1± 1.1	10.8 ± 0.7	10.5± 0.9	12.4± 1.7	11.1± 0.9	11.3± 0.9
25 ррт	10.6± 0.9	11.4± 1.2	11.1± 0.9	10.5± 0.9	12.5± 1.5	11.3± 0.9	11.5± 0.9
50 ppm	10.3± 0.8	10.7± 1.3	10.6± 0.9	10.4± 0.8	12.1± 1.5	11.0± 1.1	10.8± 1.1*
100 ppm	10.4± 0.8	10.7± 1.2	11.1± 1.0	10.0± 0.8*	12.4± 1.4	11.5± 1.2	11.1± 0.8
Significant difference;	* : P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			
N260)							F

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

UNIT : g
REPORT TYPE : A1 104

SEX : FEMALE

roup Name	Administration 50-7(7)	n week-day(effective) 53-7(7)	54-7 (7)	58-7(7)	62-7 (7)	66-7 (7)	70-7 (7)
Control	10.5± 0.8	11.2± 0.7	10.8± 0.8	11.0± 0.8	11.5± 0.8	11.6± 0.9	11.7± 0.8
25 ppm	10.8± 0.8	11.4± 0.9	11.2± 0.9*	11.3± 0.8	11.8± 1.0	11.8± 1.1	12.0± 1.2
50 ppm	10.1± 0.6*	11.1± 0.9	10.8± 0.7	10.6± 0.7*	11.5± 0.9	11.2± 0.9	11.6± 1.0
100 ppm	10.5± 0.8	10.8± 0.7*	10.7± 0.8	10.8± 0.7	11.4± 0.9	11.5± 0.9	11.8± 0.8
Significant difference;	*: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			
IAN260)							1

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

UNIT : g
REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 11

oup Name	Administration	week-day(effective)					
	74-7 (7)	78–7 (7)	82-7 (7)	86-7 (7)	90-7(7)	94-7(7)	98-7 (7)
Control	11.5± 1.1	11.5± 1.1	11.4± 1.1	11.8± 1.1	12.0± 1.0	11.7± 1.5	11.9± 1.6
25 ppm	11.8± 1.0	12.0± 0.9	11.8± 1.0	12.1± 1.2	12.2± 1.1	12.2± 0.9	12.5± 1.0
50 ррш	11.5± 1.1	11.6± 1.2	11.6± 1.3	12.0± 1.7	12.0± 1.9	11.9± 1.3	12.6± 1.4
100 ppm	11.4± 1.1	11.7± 1.0	11.6± 1.1	11.9± 0.9	11.8± 1.0	11.6± 1.9	12.0± 2.0
Significant difference	ce; *: P ≤ 0.05 *	o*: P ≤ 0.01		Test of Dunnett			

(HAN260)

FOOD CONSUMPTION CHANGES (SUMMARY)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

ALL ANIMALS

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 12

Group Name	Administratio	on week-day(effective) 104-7(7)		
Control	11.6± 1.9	12.2± 1.0		
25 ppm	12.4± 1.3	12.4± 1.3		
50 ppm	12.3± 1.7	12.0 ± 1.9		
100 ppm	12.3± 1.3	11.9± 1.7		
Significant difference;	*: P ≤ 0.05	**: P ≤ 0.01	Test of Dunnett	
(HANDCO)				RAISZ

(HAN260)

APPENDIX F 1

HEMATOLOGY: MALE

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

roup Name	NO. of Animals	RED BLOOD CELL 1 O ⁶ /µl	HEMOGLOBIN g/dl	HEMATOCRIT %	MCV f l	MCH pg	MCHC g∕dl	PLATELET 1 0³/µl
Control	43	8.02± 1.48	13.5± 2.8	39.6± 6.9	49. 5 ± 3. 1	16.8± 1.5	33.9± 1.9	955± 328
25 ppm	44	8.19± 1.59	13.6± 3.0	39.8± 7.3	48.8± 3.1	16.5± 1.5	33.8± 1.8	997± 365
50 ppm	42	8.49± 1.65	14.3± 2.8	41.3± 7.1	49.4± 6.6	17.0± 2.3	34.3± 1.4	909± 377
100 ppm	36	8.16± 1.48	13.7± 2.9	40.2± 7.3	49.3± 2.9	16.8± 1.5	33.9± 1.8	934± 315

(HCL070)

BAIS 4

SEX : MALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME: 1

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

oup Name	NO. of Animals	RETICULOCY %	Е	
Control	43	5.0± 4	0	
25 ppm	44	4.9± 3.	9	
50 ppm	42	4.9± 7	1	
100 ppm	36	4.5± 3.		

(HCL070)

BAIS 4

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME : 1 SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

roup Name	NO: of Animals	WBC 1 0³∕µl	Dii N-BAND	ferentia	1 WBC (% N-SEG	6)	EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	43	5.97± 2.03	0±	1	46±	9	2±	1	0±	0	5±	2	45±	10	2±	5
25 ppm	44	6.24± 2.70	1±	1	49±	10	2±	1	0±	0	5±	2	43±	11	1±	3
50 ppm	42	7.90± 10.13	0±	1	48±	10	2±	1	0±	0	5±	2	41±	11	3±	14
100 ppm	36	5.27± 1.78	1生	1	46±	7	2±	1	0±	0	5±	2	45±	8	2±	2

PAGE: 3

(HCL070) BAIS 4

APPENDIX F 2

HEMATOLOGY: FEMALE

STUDY NO. : 0535 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj] MEASURE. TIME : 1

SEX : FEMALE REPORT TYPE : A1 HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

oup Name	NO. of Animals	RED BLOOD CELL 1 O ^s /µl	HEMOGLOBIN g/dl	HEMATOCRIT %	MCV f l	MCH pg	MCHC g∕dl	PLATELET 1 0³/µl
Control	37	8.23± 0.88	15.1± 1.7	42.1± 4.0	51.3± 2.1	18.3± 0.5	35.7± 1.1	651± 175
25 ppm	45	8.19± 0.94	14.9± 1.7	41.9± 3.7	51.4± 3.1	18.2± 1.0	35.4± 1.6	675± 185
50 ppm	36	7.90± 1.43	14.5± 2.4	40.7± 5.9	52.7± 7.9	18.5± 1.7	35.4± 1.7	636± 207
100 ppm	39	7.94± 1.16	14.8± 2.1	41.9± 5.0	53.4± 5.0**	18.6± 0.9*	35.0± 2.0**	644± 109

(HCL070)

BAIS 4

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME: 1

SEX : FEMALE REPORT TYPE : A1 HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

roup Name	NO. of Animals	RETICUL %	ſE	
Control	37	3.1±	. 2	
25 ppm	45	3.3±	. 8	
50 ppm	36	4.8±	. 0*	
100 ppm	39	3.9±	.5**	

(HCL070)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

oup Name	NO. of Animals	₩BC 1 0³∕μℓ	Dif N-BAND	fferential	WBC (9 N-SEG	6)	EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	37	2.99± 1.41	1±	1	38±	10	2±	1	0±	0	5±	2	54±	10	1±	1
25 ppm	45	8.08± 34.45	0±	1	41±	11	2±	1	0±	0	5±	1	49±	11	3±	14
50 ppm	36	5.26± 11.34	1±	1	40±	11	2±	1	0±	0	5±	2	46±	13	6±	19
100 ppm	39	6.08± 12.05	0±	1	39±	12	2±	1	0±	0	4±	2	49±	15	6±	21

(HCL070)

BAIS 4

APPENDIX G 1

BIOCHEMISTRY: MALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

oup Name	NO. of Animals	TOTAL P.	ROTEIN	ALBUMIN g/dl		A/G RAT	10	T-BILI mg/dl		GLUCOSE mg/dl		T-CHOLE: mg∕dl	STEROL	TRIGLYC mg/dl	TRIGLYCERIDE mg/dl	
Control	43	6.6±	0.3	3.0±	0.3	0.8±	0. 1	0.17±	0.05	162±	21	162±	40	86±	43	
25 ppm	44	6.6±	0.3	3.0±	0.3	0.8±	0. 1	0.16±	0.03	166生	19	160±	50	81±	57	
50 ppm	42	6.7±	0.3	3.0±	0.2	0.8±	0. 1	0.30±	0.66	163±	23	169±	53	103±	104	
100 ppm	36	6.8±	0.5	3.1±	0.3	0.8±	0. 1	0.17±	0.05	163±	27	168±	48	81±	42	

(HCL074)

STUDY NO. : 0535 ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE, TIME : 1 SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

oup Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/ l		ALT I U/2		LDH IU/l		ALP I U / l		G-GTP IU/L		CK I U / 2	
Control	43	232±	49	105±	56	44±	20	181±	46	247±	70	9±	5	121±	37
25 ppm	44	230±	59	109±	42	43±	14	205±	57	254±	82	9±	3	136生	42
50 ppm	42	247±	74	1 17 ±	108	46±	21	196±	73	251±	110	8±	4	135±	47
100 ppm	36	245±	64	115±	40	52±	29	191±	55	267±	220	11±	7	132±	44

(HCL074)

BAIS 4

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

PAGE: 3 Group Name NO. of UREA NITROGEN CREATININE SODIUM POTASSIUM CHLORIDE CALCIUM INORGANIC PHOSPHORUS Animals mg/dl mg/dl $m Eq / \ell$ mEq∕£ m Eq∕**£** mg/dl mg/dl Control 43 $19.2 \pm$ 3. 1 $0.6 \pm$ 0.1 $142 \pm$ $3.8 \pm$ 0.3 $105\pm$ 10.5 \pm 0.2 4.2± 0.5 25 ppm 44 19.8± 3.4 0.6± 0.1 142± 2 $3.8 \pm$ 0.3 105± 1 10.4土 0.3 $4.0 \pm$ 0.5 50 ppm 42 19.1± 3.3 0.6± 0.1 141土 1 $3.7 \pm$ 0.3 $105\pm$ 2 10.4土 4.0± 0.7 100 ppm 36 19.8± 3.2 $0.6 \pm$ 0.1 $142\pm$ 2 $3.7\pm$ 0.3 105± 2 $10.5 \pm$ 0.4 4.1± 0.5 Significant difference; $*: P \leq 0.05$ **: $P \leq 0.01$ Test of Dunnett

(HCL074)

APPENDIX G 2

BIOCHEMISTRY: FEMALE

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME: 1

SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

Group Name NO. of TOTAL PROTEIN ALBUMIN A/G RATIO T-BILIRUBIN GLUCOSE T-CHOLESTEROL TRIGLYCERIDE Animals g/dl g/dl mg/dl mg/dl mg/dl mg/dl Control 37 $6.9 \pm$ 0.4 $3.6\pm$ 0.3 1.1± 0.1 0.13 ± 0.02 $154\pm$ 15 $125 \pm$ 23 $39\pm$ 21 25 ppm 45 6.8± 0.4 $3.6 \pm$ 0.3 1.1生 0. 1 0.15± 0.11 155± 26 22 15 $129 \pm$ $46\pm$ 36 50 ppm $6.8 \pm$ 0.5 $3.6 \pm$ 1.1± 0.23 ± 0.52 150± 0.4 0.1 17 $129 \pm$ 26 $57\pm$ 45 100 ppm 39 $6.9 \pm$ 0.5 $3.6 \pm$ 0.4 1.1± 0.1 35 87 0.16± 0.16 $154\pm$ 17 $141\pm$ $65\pm$ Significant difference; $*: P \le 0.05$ **: P ≤ 0.01 Test of Dunnett

PAGE: 4

(HCL074) BAIS 4

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 PHOSPHOLIPID AST ALT LDH ALP G-GTP CK Animals mg/dl IU/2 IU/l IU/2 IU/l IU/1 IU/l Control 37 $221\pm$ 39 130± 75 60± 32 206± 77 $132\pm$ 35 $3\pm$ 2 98± 24 25 ppm 45 $227\pm$ 38 220 154± 63± 67 $287 \pm$ 514 150± $3\pm$ 2 62 116± 73 36 50 ppm 231± 46 151± 104 $62\pm$ 34 $233\pm$ 5 112 171士 129 4± 118± 64 100 ppm 39 $250\pm$ 57* 137± 91 60± 33 $240\pm$ 168 158± 104 $3\pm$ 1 $105\pm$ Significant difference ; $*: P \le 0.05$ **: P ≤ 0.01 Test of Dunnett

(HCL074)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

roup Name Control	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq∕ £		POTASSIUM mEq/l		CHLORIDE m Eq / L		CALCIUM mg/dl		INORGANIC PHOSPHORUS	
	37	17.5±	1. 7	0.5±	0.0	141±	2	3.5±	0.3	103±	2	10.5±	0.4	3.9±	0.6
25 ppm	45	17.8±	1.7	0.5±	0.1	141±	1	3.4±	0.3	103±	2	10.5±	0.4	3.8±	0.8
50 ppm	36	18.0±	2.0	0.5±	0.1	141±	2	3.4±	0.4	102生	2	10.5±	0.3	4.1±	0.7
100 ppm	39	18.5±	3. 2	0.5±	0.1	141±	1	3.4±	0.4	103±	2	10.6±	0.4	3.9±	0.9

(HCL074)

APPENDIX H 1

URINALYSIS: MALE

URINALYSIS

STUDY NO. : 0535 ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

PAGE: 1

roup Name	NO. of	pH_							Protein	Glucose	Ketone body	Bilirubin
	Animals	5.0	6.0	6.5	7.0	7.5	8.0	8.5 CHI	- ± + 2+ 3+ 4+ CHI	- ± + 2+ 3+ 4+ CHI	± + 2+ 3+ 4+ CHI	- + 2+ 3+ CHI
Control	44	0	0	3	9	16	20	9	0 0 0 7 33 4	44 0 0 0 0 0	41 2 0 0 0 0	49 1 0 0
0011101	77	U	v	3	3	10	20	4	0 0 0 7 33 4	44 0 0 0 0 0	41 3 0 0 0 0	43 1 0 0
25 ppm	44	0	0	0	3	23	17	1	0 0 1 4 36 3	44 0 0 0 0 0	42 2 0 0 0 0	43 1 0 0
50 ррш	42	0	0	2	3	16	20	1	0 0 1 6 28 7	42 0 0 0 0 0	42 0 0 0 0 0	41 1 0 0
100 ppm	37	0	1	2	2	18	13	1	0 0 2 9 22 4	37 0 0 0 0 0	37 0 0 0 0 0	37 0 0 0

Significant difference ; $*: P \leq 0.05$

 $** : P \leq 0.01$

Test of CHI SQUARE

(HCL101)

BAIS 4

URINALYSIS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

PAGE: 2

Group Name	NO. of Animals	Occult blood - ± + 2+ 3+ CHI	Urobilinogen ± + 2+ 3+ 4+ CHI		
Control	44	41 1 0 0 2	44 0 0 0 0		
25 ppm	44	43 0 0 1 0	44 0 0 0 0		
50 ppm	42	41 1 0 0 0	42 0 0 0 0		
100 ppm	37	36 0 0 1 0	37 0 0 0 0		
Significant	difference	; *:P≤0.05 **	$P \leq 0.01$	Test of CHI SQUARE	
(HCI 101)		-			

(HCL101)

BAIS 4

APPENDIX H 2

URINALYSIS: FEMALE

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

PAGE: 3

up Name	NO. of	0. of pH			Protein	Glucose	Ketone body	Bilirubin				
	Animals	5. 0	6.0	6.5	7. 0	7. 5	8. 0	8.5 CHI	- ± + 2+ 3+ 4+ CHI	- ± + 2+ 3+ 4+ CHI	- ± + 2+ 3+ 4+ CHI	- + 2+ 3+ CHI
Control	40	0	2	2	6	9	13	8	2 10 11 8 7 2	40 0 0 0 0 0	25 15 0 0 0 0	40 0 0 0
25 ppm	45	0	3	1	3	-9	17	12	2 5 14 18 4 2	45 0 0 0 0 0	32 13 0 0 0 0	45 0 0 0
50 ppm	37	0	2	3	4	4	16	8	2 4 9 14 8 0	37 0 0 0 0 0	26 11 0 0 0 0	36 0 0 1
100 ppm	39	0	2	1	2	5	18	11	1 3 9 12 11 3	39 0 0 0 0 0	17 22 0 0 0 0	38 1 0 0

(HCL101) BAIS 4

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME: 1 SEX: FEMALE

Group Name	NO. of Animals	Occult blood - ± + 2+ 3+ CHI	Urobilinogen ± + 2+ 3+ 4+ CHI		
Control	40	39 1 0 0 0	40 0 0 0 0		
25 ppm	45	43 1 1 0 0	45 0 0 0 0	·	
50 ppm	37	33 0 0 1 3	36 0 0 1 0		
100 ppm	39	37 0 1 0 1	39 0 0 0 0		·
Significant	difference	; *: P ≤ 0.05 **	: P ≤ 0.01	Test of CHI SQUARE	
(HCL101)					BAIS 4

APPENDIX I 1

GROSS FINDINGS: MALE

ALL ANIMALS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1

SEX : MALE

rgan	Findings	Group Name Control NO. of Animals 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
kin/app	nodule	4 (8)	3 (6)	3 (6)	4 (8)
	scab	1 (2)	1 (2)	0 (0)	0 (0)
ubcutis	edema .	0 (0)	1 (2)	1 (2)	0 (0)
	jaundice	0 (0)	0 (0)	2 (4)	1 (2)
	mass	8 (16)	9 (18)	5 (10)	10 (20)
ung	white zone	5 (10)	2 (4)	3 (6)	3 (6)
	red zone	0 (0)	2 (4)	3 (6)	0 (0)
	nodule	2 (4)	0 (0)	0 (0)	2 (4)
	voluminus	0 (0)	1 (2)	0 (0)	0 (0)
ymph node	enlarged	0 (0)	0 (0)	2 (4)	1 (2)
hymus	nodule	0 (0)	0 (0)	1 (2)	0 (0)
pleen	enlarged	7 (14)	4 (8)	5 (10)	4 (8)
	white zone	1 (2)	1 (2)	0 (0)	0 (0)
eart	white zone	0 (0)	0 (0)	0 (0)	1 (2)
	nodule	0 (0)	1 (2)	0 (0)	0 (0)
ongue	nodule	0 (0)	1 (2)	0 (0)	0 (0)
alivary gl	nodule	0 (0)	1 (2)	0 (0)	0 (0)
orestomach	nodule	1 (2)	0 (0)	1 (2)	0 (0)
	ulcer	1 (2)	0 (0)	1 (2)	3 (6)
l stomach	red zone	0 (0)	0 (0)	0 (0)	1 (2)
	nodule	0 (0)	2 (4)	0 (0)	0 (0)
	ulcer	1 (2)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0535 ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1

SEX : MALE

rgan	Findings	Group Name Control No. of Animals 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
iver	enlarged	0 (0)	4 (8)	0 (0)	0 (0)
	nodule	2 (4)	1 (2)	1 (2)	0 (0)
	rough	1 (2)	1 (2)	2 (4)	0 (0)
	granular	0 (0)	0 (0)	0 (0)	1 (2)
	nodular	0 (0)	1 (2)	0 (0)	0 (0)
	herniation	7 (14)	3 (6)	2 (4)	5 (10)
idney	white zone	0 (0)	0 (0)	0 (0)	1 (2)
	nodule	1 (2)	0 (0)	0 (0)	0 (0)
	cyst	1 (2)	0 (0)	0 (0)	0 (0)
	granular	1 (2)	3 (6)	5 (10)	3 (6)
rethra	nodule	0 (0)	0 (0)	1 (2)	0 (0)
ituitary	enlarged	0 (0)	0 (0)	1 (2)	3 (6)
	red zone	2 (4)	1 (2)	2 (4)	1 (2)
	nodule	0 (0)	4 (8)	2 (4)	4 (8)
hyroid	enlarged	1 (2)	2 (4)	6 (12)	2 (4)
	nodule	1 (2)	1 (2)	0 (0)	1 (2)
drenal	enlarged	0 (0)	1 (2)	1 (2)	3 (6)
	nodule	0 (0)	0 (0)	1 (2)	0 (0)
estis	nodule	43 (86)	49 (98)	45 (90)	43 (86)
cain	red zone	0 (0)	0 (0)	1 (2)	0 (0)
	nodule	2 (4)	0 (0)	0 (0)	0 (0)
inal cord	red zone	0 (0)	0 (0)	1 (2)	0 (0)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1

SEX : MALE

Organ	Findings	Group Name Control NO. of Animals 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
periph nerv	nodule	2 (4)	0 (0)	0 (0)	0 (0)
eye	turbid	0 (0)	0 (0)	0 (0)	1 (2)
	white	2 (4)	4 (8)	3 (6)	2 (4)
	red	1 (2)	0 (0)	0 (0)	0 (0)
	exophthalmos	0 (0)	0 (0)	1 (2)	0 (0)
ymbal gl	nodule	0 (0)	0 (0)	0 (0)	2 (4)
one	nodule	1 (2).	0 (0)	0 (0)	0 (0)
eritoneum	nodule	1 (2)	2 (4)	1 (2)	2 (4)
etroperit	mass	0 (0)	0 (0)	1 (2)	0 (0)
bdominal c	hemorrhage	1 (2)	0 (0)	0 (0)	0 (0)
	ascites	2 (4)	3 (6)	2 (4)	2 (4)
dipose	nodule	0 (0)	0 (0)	1 (2)	0 (0)
horacic ca	pleural fluid	1 (2)	2 (4)	2 (4)	2 (4)
ther	forelimb:nodule	0 (0)	0 (0)	0 (0)	1 (2)
	upper jaw:nodule	0 (0)	0 (0)	1 (2)	0 (0)
	nose:nodule	0 (0)	1 (2)	0 (0)	1 (2)
hole body	anemic	0 (0)	1 (2)	0 (0)	0 (0)

APPENDIX I 2

GROSS FINDINGS : MALE

DEAD AND MORIBUND ANIMALS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

rgan	Findings	Group Name NO. of Animals	Con 6 (%)	6 (25 ppm %) 8	50 ppm (%) 1	100 ppm 4 (%)
kin/app	nodule		0 (0)	1 (17) 0	(0)	0 (0)
ubcutis	edema		0 (0)	1 (17) 1	(13)	0 (0)
	jaundice		0 (0)	0 (0) 2	(25)	1 (7)
	mass		1 (17)	1 (17) 1	(13)	3 (21)
ung	white zone		0 (0)	0 (0) 0	(0)	1 (7)
	red zone		0 (0)	2 (33) 3	(38)	0 (0)
	nodule		0 (0)	0 (0) 0	(0)	1 (7)
	voluminus		0 (0)	1 (17) 0	(0)	0 (0)
mph node	enlarged		0 (0)	0 (0) 1	(13)	1 (7)
pleen	enlarged		2 (33)	3 (50) 3	(38)	3 (21)
eart	white zone		0 (0)	0 (0) 0	(0)	1 (7)
ongue	nodule		0 (0)	1 (17) 0	(0)	0 (0)
orestomach	ulcer		1 (17)	0 (0) 1	(13)	3 (21)
l stomach	red zone		0 (0)	0 (0) 0	(0)	1 (7)
	nodule		0 (0)	1 (17) 0	(0)	0 (0)
	ulcer		1 (17)	0 (0) 0	(0)	0 (0)
iver	enlarged		0 (0)	4 (67) 0	(0)	0 (0)
	rough		0 (0)	1 (17) 0	(0)	0 (0)
	granular		0 (0)	0 (0) 0	(0)	1 (7)
	nodular		0 (0)	1 (17) 0	(0)	0 (0)
	herniation		1 (17)	1 (17) 0	(0)	2 (14)
dney	granular		0 (0)	0 (0) 1	(13)	0 (0)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

organ	Findings	Group Name NO. of Animals 6	Control (%)	25 ppm 6 (%)	50 ppm 8 (%)	100 ppm 14 (%)
oituitary	enlarged	0	(0)	0 (0)	1 (13)	2 (14)
,	red zone			0 (0)	1 (13)	0 (0)
hyroid	enlarged			0 (0)	1 (13)	0 (0)
drenal	enlarged			0 (0)		
estis	nodule			5 (83)	1 (13) 3 (38)	2 (14)
ain	red zone					7 (50)
4111	nodule			0 (0)	1 (13)	0 (0)
inal cord	red zone			0 (0)	0 (0)	0 (0)
	nodule			0 (0)	1 (13)	0 (0)
riph nerv				0 (0)	0 (0)	0 (0)
e	turbid			0 (0)	0 (0)	1 (7)
	white	1	(17)	0 (0)	0 (0)	1 (7)
	red	1	(17)	0 (0)	0 (0)	0 (0)
	exophthalmos	. 0	(0)	0 (0)	1 (13)	0 (0)
mbal gl	nodule	0	(0)	0 (0)	0 (0)	2 (14)
ne	nodule	1	(17)	0 (0)	0 (0)	0 (0)
ritoneum	nodule	0	(0)	0 (0)	0 (0)	1 (7)
troperit	mass	0	(0)	0 (0)	1 (13)	0 (0)
dominal c	hemorrhage	1	(17)	0 (0)	0 (0)	0 (0)
	ascites	1	(17)	1 (17)	1 (13)	1 (7)
ipose	nodule	0	(0)	0 (0)	1 (13)	0 (0)
oracic ca	pleural fluid	0		1 (17)	2 (25)	1 (7)
ther	forelimb:nodule			0 (0)	0 (0)	1 (7)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX

: MALE

Organ	Findings	Group Name NO. of Animals	Control 6 (%)	25 ppm 6 (%)	50 ppm 8 (%)	100 ppm 14 (%)
rhole body	anemic		0 (0)	1 (17)	0 (0)	0 (0)
HPT080)						R

APPENDIX I 3

GROSS FINDINGS : MALE

SACRIFICED ANIMALS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : MALE

rgan	Findings	Group Name Control NO. of Animals 44 (%)	25 ppm 44 (%)	50 ppm 42 (%)	100 ppm 36 (%)
kin/app	nodule	4 (9)	2 (5)	3 (7)	4 (11)
	scab	1 (2)	1 (2)	0 (0)	0 (0)
ubcutis	mass	7 (16)	8 (18)	4 (10)	7 (19)
ung	white zone	5 (11)	2 (5)	3 (7)	2 (6)
	nodule	2 (5)	0 (0)	0 (0)	1 (3)
ymph node	enlarged	0 (0)	0 (0)	1 (2)	0 (0)
hymus	nodule	0 (0)	0 (0)	1 (2)	0 (0)
pleen	enlarged	5 (11)	1 (2)	2 (5)	1 (3)
	white zone	1 (2)	1 (2)	0 (0)	0 (0)
eart	nodule	0 (0)	1 (2)	0 (0)	0 (0)
alivary gl	nodule	0 (0)	1 (2)	0 (0)	0 (0)
orestomach	nodule	1 (2)	0 (0)	1 (2)	0 (0)
l stomach	nodule	0 (0)	1 (2)	0 (0)	0 (0)
iver	nodule	2 (5)	1 (2)	1 (2)	0 (0)
	rough	1 (2)	0 (0)	2 (5)	0 (0)
	herniation	6 (14)	2 (5)	2 (5)	3 (8)
idney	white zone	0 (0)	0 (0)	0 (0)	1 (3)
	nodule	1 (2)	0 (0)	0 (0)	0 (0)
	cyst	1 (2)	0 (0)	0 (0)	0 (0)
	granular	1 (2)	3 (7)	4 (10)	3 (8)
rethra	nodule	0 (0)	0 (0)	1 (2)	0 (0)
ituitary	enlarged	0 (0)	0 (0)	0 (0)	1 (3)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : MALE

PAGE: 2

rgan	Findings	Group Name C NO. of Animals 44 (%	ontrol 25 ppm) 44 (%)	50 ppm 42 (%)	100 ppi 36 (%)
ituitary	red zone	2 (5) 1 (2)	1 (2)	1 (3)
	nodule	0 (2 (5)	4 (11)
hyroid	enlarged	1 (:	2) 2 (5)	5 (12)	2 (6)
	nodule	1 (2) 1 (2)	0 (0)	1 (3)
lrenal	enlarged	0 (0) 1 (2)	0 (0)	1 (3)
	nodule	0 (0 (0)	1 (2)	0 (0)
stis	nodule	41 (9	3) 44 (100)	42 (100)	36 (100)
'e	white	1 (2) 4 (9)	3 (7)	1 (3)
ritoneum	nodule	1 (2 (5)	1 (2)	1 (3)
dominal c	ascites	. 1 (2 (5)	1 (2)	1 (3)
oracic ca	pleural fluid	1 (2) 1 (2)	0 (0)	1 (3)
her	upper jaw:nodule	0 (0 (0)	1 (2)	0 (0)
	nose:nodule	0 (0) 1 (2)	0 (0)	1 (3)

(HPT080)

BAIS 4

APPENDIX I 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1

SEX : FEMALE

rgan	Findings	Group Name NO. of Animals	Control 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
ubcutis	jaundice		2 (4)	0 (0)	1 (2)	3 (6)
	mass		6 (12)	11 (22)	9 (18)	9 (18)
ung	white zone		1 (2)	1 (2)	1 (2)	1 (2)
	red zone		1 (2)	0 (0)	0 (0)	0 (0)
	nodule		1 (2)	1 (2)	1 (2)	1 (2)
ymph node	enlarged		3 (6)	2 (4)	1 (2)	2 (4)
pleen	enlarged		8 (16)	3 (6)	7 (14)	9 (18)
	nodule		0 (0)	0 (0)	1 (2)	0 (0)
eart	white zone		0 (0)	0 (0)	0 (0)	1 (2)
restomach	nodule		1 (2)	1 (2)	0 (0)	0 (0)
	ulcer		2 (4)	1 (2)	2 (4)	1 (2)
	erosion		0 (0)	1 (2)	0 (0)	0 (0)
l stomach	nodule		0 (0)	0 (0)	1 (2)	0 (0)
	ulcer		1 (2)	1 (2)	0 (0)	0 (0)
	erosion		0 (0)	0 (0)	0 (0)	1 (2)
ecum	dilated		0 (0)	0 (0)	1 (2)	0 (0)
iver	enlarged		1 (2)	0 (0)	0 (0)	2 (4)
	white zone		3 (6)	1 (2)	1 (2)	2 (4)
	red zone		1 (2)	1 (2)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	1 (2)	1 (2)
	rough		2 (4)	2 (4)	4 (8)	6 (12)
	herniation		12 (24)	9 (18)	8 (16)	9 (18)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

rgan	Findings	Group Name Control NO. of Animals 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
idney	white zone	1 (2)	0 (0)	0 (0)	1 (2)
	nodule	0 (0)	0 (0)	1 (2)	1 (2)
	cyst	0 (0)	1 (2)	0 (0)	0 (0)
	granular	0 (0)	0 (0)	1 (2)	0 (0)
	hydronephrosis	0 (0)	0 (0)	2 (4)	0 (0)
rin bladd	red zone	0 (0)	0 (0)	1 (2)	0 (0)
	urine:marked retention	0 (0)	0 (0)	1 (2)	0 (0)
ituitary	enlarged	3 (6)	3 (6)	5 (10)	2 (4)
	red zone	3 (6)	7 (14)	2 (4)	5 (10)
	black zone	1 (2)	0 (0)	0 (0)	0 (0)
	nodule	6 (12)	3 (6)	3 (6)	5 (10)
	cyst	0 (0)	0 (0)	0 (0)	1 (2)
hyroid	enlarged	0 (0)	0 (0)	1 (2)	2 (4)
	nodule	0 (0)	1 (2)	1 (2)	1 (2)
drenal	enlarged	1 (2)	0 (0)	1 (2)	1 (2)
	nodule	0 (0)	0 (0)	0 (0)	1 (2)
vary	enlarged	0 (0)	1 (2)	1 (2)	0 (0)
	nodule	0 (0)	0 (0)	0 (0)	1 (2)
	cyst	3 (6)	6 (12)	2 (4)	1 (2)
erus	black zone	0 (0)	0 (0)	1 (2)	0 (0)
	nodule	8 (16)	2 (4)	9 (18)	9 (18)
	cyst	0 (0)	1 (2)	0 (0)	0 (0)

SEX

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1

: FEMALE

Organ	Findings	Group Name Control NO. of Animals 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
prep/cli gl	nodule	0 (0)	0 (0)	0 (0)	1 (2)
brain	red zone	0 (0)	0 (0)	1 (2)	0 (0)
	hemorrhage	0 (0)	0 (0)	1 (2)	0 (0)
	deformed	0 (0)	1 (2)	0 (0)	0 (0)
spinal cord	red zone	0 (0)	0 (0)	0 (0)	1 (2)
eye	turbid	1 (2)	0 (0)	0 (0)	0 (0)
	white	4 (8)	5 (10)	7 (14)	0 (0)
Zymbal gl	nodule	0 (0)	0 (0)	0 (0)	2 (4)
bone	nodule	0 (0)	0 (0)	1 (2)	0 (0)
mediastinum	mass	0 (0)	0 (0)	0 (0)	2 (4)
peritoneum	nodule	1 (2)	1 (2)	0 (0)	2 (4)
	adhesion	0 (0)	0 (0)	1 (2)	0 (0)
abdominal c	ascites	2 (4)	0 (0)	0 (0)	1 (2)
thoracic ca	pleural fluid	1 (2)	0 (0)	0 (0)	3 (6)
other	eye lid:nodule	1 (2)	0 (0)	0 (0)	0 (0)
	upper jaw:nodule	1 (2)	0 (0)	0 (0)	0 (0)
whole body	anemic	1 (2)	0 (0)	0 (0)	1 (2)

APPENDIX I 5

GROSS FINDINGS : FEMALE

DEAD AND MORIBUND ANIMALS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

rgan	Findings	Group Name NO. of Animals	13	Control (%)		25 ppm 5 (%)	14	50 ppm (%)	11	100 ppm (%)
ubcutis	jaundice		2	(15)	ı) (0)	() (0)	3	(27)
	mass		2	(15)	:	2 (40)	3	3 (21)	2	(18)
ung	white zone		0	(0)	ı	0)	1	. (7)	0	(0)
	red zone		1	(8)	1	0)	((0)	0	(0)
	nodule		1	(8)		0 (0)	1	. (7)	0	(0)
ymph node	enlarged		3	(23)		2 (40)	1	. (7)	2	(18)
pleen	enlarged		8	(62)	:	2 (40)	4	(29)	7	(64)
eart	white zone		0	(0)		0 (0)	((0)	1	(9)
orestomach	nodule		1	(8)		0 (0)	((0)	0	(0)
	ulcer		2	(15)		1 (20)	1	. (7)	1	(9)
	erosion		0	(0)		1 (20)	((0)	0	(0)
lstomach	ulcer		1	(8)		1 (20)	((0)	0	(0)
	erosion		0	(0)		0 (0)	((0)	1	(9)
iver	enlarged		1	(8)		0 (0)	((0)	2	(18)
	white zone		1	(8)		0 (0)	1	. (7)	1	(9)
	nodule		0	(0)		0 (0)	1	. (7)	0	(0)
	rough		0	(0)		0 (0)	2	? (14)	4	(36)
	herniation		6	(46)		1 (20)	4	1 (29)	1	(9)
dney	white zone		1	(8)		0 (0)	((0)	1	(9)
	nodule		0	(0)		0 (0)	:	(7)	1	(9)
	granular		0	(0)		0 (0)	:	(7)	0	(0)
	hydronephrosis		0	(0)		0 (0)	2	? (14)	0	(0)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

gan	Findings	Group Name NO. of Animals 13	Control (%)	25 ppm 5 (%)	50 ppm 14 (%)	100 ppm 11 (%)
rin bladd	red zone	0	(0)	0 (0)	1 (7)	0 (0)
	urine:marked retention	0	(0)	0 (0)	1 (7)	0 (0)
ituitary	enlarged	2	(15)	2 (40)	1 (7)	0 (0)
	red zone	0	(0)	1 (20)	1 (7)	2 (18)
	black zone	1	(8)	0 (0)	0 (0)	0 (0)
	nodule	1	(8)	0 (0)	0 (0)	2 (18)
	cyst	0	(0)	0 (0)	0 (0)	1 (9)
lrena1	enlarged	0	(0)	0 (0)	0 (0)	1 (9)
	nodule	0	(0)	0 (0)	0 (0)	1 (9)
ary	enlarged	0	(0)	0 (0)	1 (7)	0 (0)
	cyst	1	(8)	1 (20)	0 (0)	0 (0)
cerus	nodule	4	(31)	0 (0)	2 (14)	2 (18)
rep/cli gl	nodule	0	(0)	0 (0)	0 (0)	1 (9)
rain	red zone		(0)	0 (0)	1 (7)	0 (0)
	hemorrhage	0	(0)	0 (0)	1 (7)	0 (0)
	deformed	0	(0)	1 (20)	0 (0)	0 (0)
oinal cord	red zone	0	(0)	0 (0)	0 (0)	1 (9)
∕e	white	0	(0)	1 (20)	2 (14)	0 (0)
mbal gl	nodule	0	(0)	0 (0)	0 (0)	2 (18)
ne	nodule	0	(0)	0 (0)	1 (7)	0 (0)
diastinum	mass	0	(0)	0 (0)	0 (0)	2 (18)
eritoneum	nodule	1	(8)	0 (0)	0 (0)	1 (9)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

Organ	Findings	Group Name NO. of Animals	Control 13 (%)	25 ppm 5 (%)	50 ppm 14 (%)	100 ppm 11 (%)
bdominal c	ascites		2 (15)	0 (0)	0 (0)	1 (9)
horacic ca	pleural fluid		1 (8)	0 (0)	0 (0)	2 (18)
hole body	anemic		1 (8)	0 (0)	0 (0)	1 (9)

APPENDIX I 6

GROSS FINDINGS : FEMALE

SACRIFICED ANIMALS

APPENDIX I 6

GROSS FINDINGS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0535 ANIMAL : RAT F

: RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : FEMALE

)rgan	Findings	Group Name Control NO. of Animals 37 (%)	25 ppm 45 (%)	50 ppm 36 (%)	100 ppm 39 (%)
subcutis	jaundice	0 (0)	0 (0)	1 (3)	0 (0)
	mass	4 (11)	9 (20)	6 (17)	7 (18)
ung	white zone	1 (3)	1 (2)	0 (0)	1 (3)
	nodule	0 (0)	1 (2)	0 (0)	1 (3)
pleen	enlarged	0 (0)	1 (2)	3 (8)	2 (5)
	nodule	0 (0)	0 (0)	1 (3)	0 (0)
orestomach	nodule	0 (0)	1 (2)	0 (0)	0 (0)
	ulcer	0 (0)	0 (0)	1 (3)	0 (0)
1 stomach	nodule	0 (0)	0 (0)	1 (3)	0 (0)
ecum	dilated	0 (0)	0 (0)	1 (3)	0 (0)
iver	white zone	2 (5)	1 (2)	0 (0)	1 (3)
	red zone	1 (3)	1 (2)	0 (0)	0 (0)
	nodule	0 (0)	0 (0)	0 (0)	1 (3)
	rough	2 (5)	2 (4)	2 (6)	2 (5)
	herniation	6 (16)	8 (18)	4 (11)	8 (21)
idney	cyst	0 (0)	1 (2)	0 (0)	0 (0)
ituitary	enlarged	1 (3)	1 (2)	4 (11)	2 (5)
	red zone	3 (8)	6 (13)	1 (3)	3 (8)
	nodule	5 (14)	3 (7)	3 (8)	3 (8)
nyroid	enlarged	0 (0)	0 (0)	1 (. 3)	2 (5)
	nodule	0 (0)	1 (2)	1 (3)	1 (3)
drenal	enlarged	1 (3)	0 (0)	1 (3)	0 (0)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : FEMALE

PAGE: 4

rgan	Findings	Group Name Control NO. of Animals 37 (%)	25 ppm 45 (%)	50 ppm 36 (%)	100 ppm 39 (%)
vary	enlarged	0 (0)	1 (2)	0 (0)	0 (0)
	nodule	0 (0)	0 (0)	0 (0)	1 (3)
	cyst	2 (5)	5 (11)	2 (6)	1 (3)
erus	black zone	0 (0)	0 (0)	1 (3)	0 (0)
	nodule	4 (11)	2 (4)	7 (19)	7 (18)
	cyst	0 (0)	1 (2)	0 (0)	0 (0)
9	turbid	1 (3)	0 (0)	0 (0)	0 (0)
	white	4 (11)	4 (9)	5 (14)	0 (0)
ritoneum	nodule	0 (0)	1 (2)	0 (0)	1 (3)
	adhesion	0 (0)	0 (0)	1 (3)	0 (0)
oracic ca	pleural fluid	0 (0)	0 (0)	0 (0)	1 (3)
ner	eye lid:nodule	1 (3)	0 (0)	0 (0)	0 (0)
	upper jaw:nodule	1 (3)	0 (0)	0 (0)	0 (0)

(HPT080)

BAIS 4

APPENDIX J 1

ORGAN WEIGHT, ABSOLUTE: MALE

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 SEX : MALE

UNIT: g

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

PAGE: 1

oup Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS	
Control	44	382± 31	0.077± 0.011	3.467± 1.347	1. 227± 0. 125	1.434± 0.346	2.710± 0.320	
25 ppm	44	380± 24	0.108± 0.203	3.718± 1.344	1.242± 0.117	1.339± 0.100	2.649± 0.214	
50 ppm	42	367± 28*	0.081± 0.036	3.647± 1.509	1.211± 0.114	1.341± 0.152	2.704± 0.355	
100 ppm	36	352± 29**	0.079± 0.029	4.003± 1.392	1.170± 0.113	1.332± 0.158	2.592± 0.199	

(HCL040) BAIS 4

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1

SEX : MALE UNIT: g

ORGAN WEIGHT: ABSOLUTE (SUMMARY)

SURVIVAL ANIMALS (105W)

	NO. of Animals	SPLEEN	LIVER	BRAIN	
Control	44	1.253± 0.743	10.727± 1.801	2.074± 0.046	
25 ppm	44	1.091± 0.478	10.903± 1.375	2.069± 0.043	
50 ppm	42	1.256± 1.349	10.879± 1.498	2. 057± 0. 044	
100 ppm	36	1.053± 0.358	10.537± 1.089	2.057± 0.046	

BAIS 4

PAGE: 2

(HCL040)

APPENDIX J 2

ORGAN WEIGHT, ABSOLUTE: FEMALE

STUDY NO. : 0535 ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX : FEMALE UNIT: g

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

Group Name	NO. of Animals	Body V	Veight	ADRE	NALS	OVAR	IES	HEAR	r	LUNG	5	KIDN	EYS	
Control	37	240±	21	0.092±	0.086	0.152±	0. 123	0.822±	0.063	0.922±	0. 085	1.659±	0.098	
25 ppm	45	252±	27	0.081±	0.008	0.240±	0.696	0.881±	0.073**	0.964±	0. 130	1.741士	0.175	
50 ppm	36	241±	27	0.082±	0. 019	0.149±	0. 125	0.878±	0. 079**	0.989±	0. 168	1.715±	0. 139	
100 ppm	39	238±	24	0.081±	0.010	0.129±	0.059	0.854±	0.076	0.994±	0. 232	1.722±	0.148	

PAGE: 3

BAIS 4 (HCL040)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX : FEMALE UNIT: g

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

up Name	NO. of Animals	SPL	EEN	LIVI	ER	BRA:		
Control	37	0.553±	0, 250	6.101±	0.822	1.862±	0.034	
25 ppm	45	0.681±	0.851	6.477±	0. 992	1.873±	0.040	
50 ppm	36	1.017±	1.818*	6.543±	0.876*	1.859±	0. 042	
100 ppm	39	0.995±	1.866*	6.711±	1.338*	1.866±	0.049	

APPENDIX K 1

ORGAN WEIGHT, RELATIVE : MALE

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 SEX : MALE

UNIT: %

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

PAGE: 1

	Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS	
Control	44	382± 31	0.020± 0.003	0.910± 0.343	0.323± 0.043	0.379± 0.112	0.714± 0.112	
25 ppm	44	380± 24	0.030± 0.064	0.983± 0.366	0.328± 0.034	0.354± 0.032	0.700± 0.062	
50 ppm	42	367± 28*	0.023± 0.014	0.997± 0.419	0.332± 0.039	0.368± 0.054	0.740± 0.103	
100 ppm	36	352± 29**	0.023± 0.008	1.134± 0.376	0.335± 0.044	0.381± 0.059	0.741± 0.079*	

(HCL042) BAIS 4

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1

SEX : MALE UNIT: %

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

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN	
Control	44	0.331 ± 0.207	2.801± 0.319	0.546± 0.042	
25 ppm	44	0.288± 0.123	2.871± 0.296	0.547± 0.036	
50 ppm	42	0.345± 0.384	2.972± 0.413	0.564± 0.047	
100 ppm	36	0.301± 0.108	3.002± 0.298*	0.588± 0.051**	
Significant	difference;	*: P ≤ 0.05 **:	P ≤ 0.01	Test of Dunnett	
(HCL042)					BATS

(HCL042)

APPENDIX K 2

ORGAN WEIGHT, RELATIVE : FEMALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX : FEMALE UNIT: % ORGAN WEIGHT: RELATIVE (SUMMARY)

SURVIVAL ANIMALS (105W)

ip Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	37	240± 21	0.038± 0.032	0.063± 0.048	0.343± 0.030	0.387± 0.050	0.693± 0.054
25 ppm	45	252± 27	0.032± 0.004	0.098± 0.290	0.351± 0.034	0.386± 0.076	0.693± 0.059
50 ppm	36	241± 27	0.034± 0.007	0.062± 0.049	0.368± 0.054*	0.418± 0.118	0.719± 0.091
100 ppm	39	238± 24	0.035± 0.007	0.054± 0.024	0.361 ± 0.045	0.422± 0.116	0.729± 0.096

(HCL042)

BAIS 4

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX : FEMALE UNIT: %

ORGAN WEIGHT: RELATIVE (SUMMARY)

SURVIVAL ANIMALS (105W)

oup Name	NO. of Animals	SPLEEN	LIVER	BRAIN	
Control	37	0.232± 0.108	2.542± 0.295	0.780± 0.067	
25 ppm	45	0.275± 0.363	2.569± 0.305	0.750± 0.075	
50 ppm	36	0.473± 1.037	2.737± 0.452**	0.781± 0.088	
100 ppm	39	0.432± 0.874	2.824± 0.505**	0.791± 0.082	

(HCL042)

APPENDIX L 1

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS : MALE

ALL ANIMALS

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

PAGE: 1

Organ	No	roup Name o. of Animals on Study rade(%) (9		25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Integumentar	y system/appandage}					
skin/app	inflammation	0 1	<50> 1 0 0 2) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	squamous cell hyperplasia		0 0 0	1 1 0 0 (2) (2) (0) (0)	0 1 0 0 (0) (2) (0) (0)	0 1 0 0 (0) (0)
	epidermal cyst		0 0 0	0 0 0 0 0 (0) (0)	0 2 0 0 (0) (4) (0) (0)	0 2 0 0 (0) (4) (0) (0)
Respiratory	system}					
asal cavit	thrombus		<50> 0 0 0 0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	3 0 0 0 0 (6) (0) (0)
	goblet cell hyperplasia	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
	eosinophilic change:olfactory epithelium		7 0 0 0 4) (0) (0)	13 21 3 0 (26) (42) (6) (0)	15 20 3 0 (30) (40) (6) (0)	20 20 0 0 (40) (40) (0) (0
	eosinophilic change:respiratory epithel:		0 0 0 0	6 0 0 0 (12) (0) (0) (0)	4 0 0 0 0 (8) (0) (0) (0)	3 0 0 0 0 (6) (6) (0) (0) (0)

b: Number of animals with lesion

c:b/a * 100

(c) Significant difference ; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

: RAT F344/DuCr1Cr1j[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

ANIMAL

PAGE: 2

		oup Name . of Animals on Study	50	ontro]	L		i	25 50	ppm				50 50	ppm				10 50)O ppi	m
rgan		ade 1 (%)	2	3 (%)	<u>4</u> (%)	<u>1</u> (%)	(%)	(%)) (%)	1 %)	2 (%)	3 (%)			(%)	(%)		3 (%)	(%)
Respiratory	system)																			
asal cavit	inflammation:foreign body	7 (14)	<50> 4 (8) (0 0)	7 (14)	0 (0)	50> 0 (0)	0 (0) (2	0 0) (2	50> 0 (0)	0 (0)	(4 8)	1 (2)	(50>	0 0) (0
	inflammation:respiratory epithelium	0 (0)	1 (2) (0 (0 0)	1 (2)	0 (0)	0 (0)	0 (0) (0 0) (0 (0)	0 (0)	0 (0)	(1 2)	0 (0)	(0 0) (0
	respiratory metaplasia:olfactory epithel	ium 0 (0)	0 (0) (0 (0	1 (2)	0 (0)	0 (0)	0 (0) (3 6) (0 (0)	(0)	0 (0)	(1 2)	0 (0)	(0 0) (0
	respiratory metaplasia:gland	7 (14)	0 (0) (0 (0	5 (10)	0 (0)	(0)	0 (0) (1	5 0) (0 (0)	(0)	0 (0)	(1 2)	0 (0)		0 0) (0
	squamous cell metaplasia:respiratory epi		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
asopharynx	inflammation	0 (0)	<50> 0 (0) (0	0	0 (0)	0 (0)	50> 0 (0)	0 (0) (0 0) (0	50> 0 (0)	0 (0)	(0	1 (2)	(50>	0 0) (0 (
ung	congestion	0 (0)	<50> 0 (0) (0	0	1 (2)	0				0 0) (0	50> 0 (0)	0 (0)	(0	0 (0)		0 0) (0

b b: Number of animals with lesion

c:b/a * 100 (c)

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj] REPORT TYPE: A1 SEX : MALE

ALL ANIMALS (0-105W)

Group Name 25 ppm Control 50 ppm 100 ppm No. of Animals on Study 50 50 50 50 Organ__ Findings_ (%) (%) (%) (%) (%) (%) (%) (%) {Respiratory system} lung <50> inflammation 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(2)(0)(0) (0)(0)(0)(0) inflammatory infiltration 0 0 0 0 0 0 (0)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) (4)(0)(0)(0) granulomatous inflammation (0)(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) (2)(0)(0)(0) (0)(0)(0)(0) bronchiolar-alveolar cell hyperplasia 0 (6)(4)(0)(0) (0)(0)(0)(0) (8)(0)(0)(0) (4)(2)(0)(0) {Hematopoietic system} bone marrow <50> <50> <50> granulation 0 (2)(0)(0)(0) (2)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) increased hematopoiesis 0 0 0 (6)(0)(0)(0) (6)(0)(0)(0) (4)(0)(0)(0) (4)(0)(0)(0) 1 : Slight 2 : Moderate Grade 4 : Severe < a > a: Number of animals examined at the site b: Number of animals with lesion b (c) c:b/a * 100

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

ANIMAL REPORT TYPE : A1 SEX : MALE ALL ANIMALS (0-105W)

PAGE: 4 Group Name Control 25 ppm 100 ppm 50 ppm No. of Animals on Study 50 50 50 Grade Organ_ Findings (%) (%) (%) (%) {Hematopoietic system} bone marrow <50> <50> granulopoiesis:increased 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (2)(0)(0)(0) spleen <50> <50> <50> <50> congestion 8 0 0 0 (16) (0) (0) (0) (18) (0) (0) (0) (14) (0) (0) (0) (10) (0) (0) (0) deposit of hemosiderin 2 0 (38) (4) (0) (0) (42) (2) (0) (0) (40) (6) (0) (0) (40) (10) (0) (0) granulation 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(2)(0)(0) fibrosis:focal (2)(0)(0)(0) (0)(4)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) increased extramedullary hematopoiesis 5 2 5 0 (10) (4) (2) (0) (10) (8) (0) (0) (4)(6)(0)(0) (8) (10) (2) (0) {Circulatory system} heart <50> <50> <50> thrombus 1 0 0 0 0 0 (0)(2)(0)(0) (0)(0)(0)(0) (2)(0)(0)(0) (0)(2)(0)(0) Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe a: Number of animals examined at the site < a > b b: Number of animals with lesion c:b/a*100 (c)

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] REPORT TYPE : A1 : MALE

PAGE: 5

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 50 2 3 4 (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Circulator	y system)				y.	
neart	myocardial fibrosis	22 (44)	(50) 1 0 0 (2) (0) (0)	<50> 21 0 0 0 (42) (0) (0) (0)	23 1 0 0 (46) (2) (0) (0)	<50> 26 1 0 0 (52) (2) (0) (0)
	subendocardial fibrosis	1 (2)	0 0 0 (0) (0)	1 1 0 0 (2) (2) (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
Digestive	system}					
ooth	epidermal cyst	0 (0)	<50> 0 0 0 (0) (0) (0)	<pre></pre>	<pre></pre>	<50> 0 0 0 0 (0) (0) (0) (0)
ongue	inflammation	0 (0)	<50> 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
	squamous cell hyperplasia	0 (0)	0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	arteritis	0 (0)	0 0 0 (0) (0)	1 0 0 0 (2) (0) (0) (0)	1 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0) (0)

Grade

b

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 ; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1

: MALE

PAGE: 6

		Group Name No. of Animals on Study Grade 1	Control 50 2 3 4	25 ppm 50 1 2 3 4	50 ppm 50 1 2 3 4	100 ppm 50
Organ	Findings	(%)	2 3 4 (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
{Digestive sy	rstem}					
stomach	ulcer:forestomach	0 (0) (<50> 1 0 0 (2) (0) (0)	<50> 2 0 0 0 (4) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 3 0 0 0 (6) (0) (0) (0)
	hyperplasia:forestomach	0 (0) (0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (2) (0) (0)	0 0 0 0 0 (0) (0)
	erosion:glandular stomach	(0) (0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (4) (0) (0) (0)
	ulcer:glandular stomach	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)
	hyperplasia:glandular stomach	. (0) (0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
liver	herniation	7 (14)	<50> 0 0 0 (0) (0) (0)	3 0 0 0 (6) (0) (0) (0)	3 0 0 0 (6) (0) (0) (0)	50> 5 0 0 0 (10) (0) (0) (0)
	necrosis:central	(0)	0 0 0 (0) (0)	1 1 0 0 (2) (2) (0) (0)	0 0 0 0 0 (0) (0)	1 1 0 0 (2) (2) (0) (0)
	necrosis:focal	0 (0)	0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)

Grade 1: Slight 2: Moderate 3: Moderate 4 a: Number of animals examined at the site

b b: Number of animals with lesion

(c) c:b/a*100

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

3 : Marked

4 : Severe

ANIMAL

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

REPORT TYPE : A1

: MALE

ALL ANIMALS (0-105W)

SEX PAGE: 7 Group Name 100 ppm Control 25 ppm 50 ppm 50 50 50 No. of Animals on Study 50 Grade 3 (%) (%) (%) (%) (%) (%) (%) Organ__ Findings_ {Digestive system} liver <50> <50> 0 degeneration:central 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(2)(0)(0) granulation (2)(2)(0)(0) (6)(0)(0)(0) (8)(0)(0)(0) (0)(0)(0)(0) inflammatory cell nest 0 0 0 (0)(0)(0)(0) (2)(2)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) clear cell focus 0 (8)(6)(0)(0) (10) (2) (0) (0) (6)(2)(0)(0) (4)(6)(0)(0) acidophilic cell focus 1 0 0 0 0 0 0 0 (0)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) basophilic cell focus (2)(2)(0)(0) (2)(2)(0)(0) (8)(4)(0)(0) (0)(2)(0)(0) mixed cell focus 0 0 (0)(0)(0)(0) (2)(2)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) 3 3 0 0 0 1 spongiosis hepatis 0 0 0 0 (0)(2)(0)(0) (6)(0)(0)(0) (6)(0)(0)(0) (6)(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; $*: P \leq 0.05$ **: $P \leq 0.01$ Test of Chi Square

(HPT150)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

(HPT150)

PAGE: 8

		oup Name Control . of Animals on Study 50	25 ppm 50	50 ppm 50	100 ppm 50
rgan	Gr Findings	ade <u>1 2 3 4</u> (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Digestive	system)				
iver	bile duct hyperplasia	<50> 2 48 0 0 (4) (96) (0) (0)	<50> 1 48 0 0 (2) (96) (0) (0)	<50> 3 46 0 0 (6) (92) (0) (0)	(50) 5 43 0 0 (10) (86) (0) (0)
ancreas	atrophy	<50> 17 6 0 0 (34) (12) (0) (0)	<50> 18 6 0 0 (36) (12) (0) (0)	<50> 17 5 0 0 (34) (10) (0) (0)	<50> 11 5 0 0 (22) (10) (0) (0)
	arteritis	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	islet cell hyperplasia	0 3 0 0 (0) (6) (0) (0)	0 1 0 0 (0) (2) (0) (0)	1 0 0 0 (2) (0) (0) (0)	0 1 0 0 (0) (2) (0) (0)
Jrinary sy	ystem}				
idney	fatty change	\(\frac{50}{0} \) \(\begin{array}{cccccccccccccccccccccccccccccccccccc	0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)
	cyst	0 1 0 0 (0) (2) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
rade a > b c)	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100 t difference; *: P ≤ 0.05 **: P ≤ 0				

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL REPORT TYPE : A1 : MALE SEX

PAGE: 9

		Group Name No. of Animals on Study	Co 50	ntrol		25 pp 50	m		50	50 ppr	n			1 50	.00 pp	m
rgan	Findings	Grade <u>1</u> (%)		3 <u>4</u> %) (%)	1 2 (%) (%)	(%)	(%)	(%)	2 (%)	3 (%)	(%)	<u>1</u> (%)		2	3 (%)	(%)
(Urinary syst	en}															
kidney	scar	1 (2)	<50> 0 (0) (0 0	0 0 (0) (0)		0 0)	0 (0)	<50 0 (0) (0	0 0)	0 (0)		<50> 1 2) (0 0) (0 (0)
	chronic nephropathy	15 (30)	29 (58) (0 0 0) (0)	21 25 (42) (50)	1 (2) (0 0)	10 (20)	30 (60) (4 8) (0	21 (42)			2 4) (0 (0)
	tubular necrosis	0 (0)	0 (0) (0 0	0 1 (0) (2)		0 0)	0 (0)	0 (0) (0 (0	0 (0)		0 0) (0 (0 (0)
	papillary necrosis	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)
	mineralization:papilla	1 (2)	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
	mineralization:pelvis	0 (0)	0 (0) (0 0 0 0) (0)	0 0	0 (0) (0 0)	1 (2)	0 (0) (0 (0	(2)) (2 4) (0 (0)	0 (0)
	transitional cell hyperplasia	0 (0)	0 (0) (0 0 0 0) (0)	0 0	0 (0) (0 (0)	1 (2)	0 (0) (0 (0	3 (6)) (0 0) (0 0) (0 (0)
	atypical tubule hyperplasia	1 (2)	0 (0) (0 0	0 0	0 (0) (0 (0)	1 (2)	0	0 (0 0)	0 (0)		0 0) (0	0 (0)

Grade 1 : Slight

2 : Moderate

4 : Severe

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

(c)

c:b/a * 100

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] REPORT TYPE : A1
SEX : MALE

ALL ANIMALS (0-105W)

Organ	I	Group Name No. of Animals on Study Grade 1 (%)	Control 50 2 3 4 (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Urinary syst	tem}					
urin bladd	papillary hyperplasia:transitional epi		<50> 1 0 0 (2) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<49> 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 (0) (2) (0) (0)
Endocrine sy	ystem}					
oituitary	angiectasis	0 (0)	<50> 0 0 0 (0) (0) (0)	<pre></pre>	(50) 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
	cyst	1 (2)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	hyperplasia	4 (8)	3 0 0 (6) (0) (0)	4 2 0 0 (8) (4) (0) (0)	6 3 0 0 (12) (6) (0) (0)	3 4 0 0 (6) (8) (0) (0)
	Rathke pouch	2 (4)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 (2) (0) (0) (0)	1 0 0 0 (2) (0) (0) (0)
hyroid	C-cell hyperplasia	9 (18)	<50> 4 0 0 (8) (0) (0)	<50> 12 4 0 0 (24) (8) (0) (0)	<50> 12 6 0 0 (24) (12) (0) (0)	<50> 9 5 0 0 (18) (10) (0) (0)
rade (a > b (c) ignificant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤					

(HPT150)

ANIMAL

SEX

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

ALL ANIMALS (0-105W)

REPORT TYPE : A1 : MALE

PAGE: 11

		Group Name No. of Animals on Study	Co 50	ntrol		50	25 pg	om			50	50 pp	m			F	100 i0	mqq
rgan	Findings	Grade 1 (%)	2	3 <u>4</u> %) (%)	<u>1</u> (%)	2 (%)	3 (%)	(%)	(9	l 6)	2 (%)	3 (%)	(%)		1 (%)	2 (%)	(%)	<u>4</u> (%
Endocrine s	system)																	
adrenal	hyperplasia:cortical cell	0 (0)	<50> 0 (0) (0 0 0) (0)	0 (0)	<50 0 (0)	0	0 (0)	(2		<50 0 0) (> 0 0)	0 (0)	(0	1	(0)	0
	hyperplasia:medulla	3 (6)	4 (8) (0 0	7 (14)	0 (0)	0 (0)	0 (0)	(8	1 3) (0	0	0 (0)	(2 4) (0 0)	0 (0)	0
	focal fatty change:cortex	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
Reproductiv	ve system}																	
estis	mineralization	2 (4)	<50> 0 (0) (0 0 0) (0)	0 (0)	(50 0 (0)	0	0 (0)	(4	2 1) (<50 0 0) (0 0)	0 (0)	(1 2) (0	(0)	0 (0
	arteritis	2 (4)	0 (0) (0 0	0 (0)	0 (0)	0 (0)	0 (0))) (0	0	0 (0)	(0	0 (0)	0 (0)	0
	interstitial cell hyperplasia	6 (12)	0 (0) (0 0	7 (14)	0 (0)	0 (0)	0 (0)	(18	9 3) (0 (0)	0	0 (0)	(3 6) (0 (0)	0 (0)	0 (0
prostate	inflammation	0 (0)	<50> 0	0 0	0 (0)	<50 0 (0)	0	0 (0)))) (<49 1 2) (> 0 0)	0 (0)	(0 (0) (0	(0)	0 (0

b: Number of animals with lesion

b

c:b/a * 100 (c)

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

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 : MALE

PAGE: 12

ergan	I	Group Name Control No. of Animals on Study 50 Grade 1 2 3 4 (%) (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
Reproductive	e system)				
rostate	hyperplasia	<50> 8 1 0 0 (16) (2) (0) (0)	7 2 0 0 (14) (4) (0) (0)	9 1 0 0 (18) (2) (0) (0)	7 0 0 0 (14) (0) (0) (0)
ummary gl	galactocele	(50) 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
pecial sens	se organs/appendage)				
e	hemorrhage	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	cataract	2 0 0 0 0 (4) (0) (0) (0)	4 0 0 0 0 (8) (0) (0) (0)	3 0 0 0 0 (6) (6) (7)	2 0 0 0 0 (4) (0) (0) (0)
	retinal atrophy	18 1 0 0 (36) (2) (0) (0)	16 4 0 0 (32) (8) (0) (0)	13 5 0 0 (26) (10) (0) (0)	12 1 0 0 (24) (2) (0) (0)
	keratitis	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 1 0 0 (0) (2) (0) (0)
rade a > b c)	1: Slight 2: Moderate 3: a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤				

(HPT150)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX

: MALE

PAGE: 13

Squamous cell metaplasia:cornea	Organ	Findings	Group Name	Control 50 2 3 4 (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
squamous cell metaplasia:cornea 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	{Special se	nse organs/appendage)					
mineralization	eye	squamous cell metaplasia:cornea		0 0 0		<50> 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0
mineralization	{Musculoske	letal system}					
<pre>(a) a: Number of animals examined at the site b b: Number of animals with lesion (c) c: b / a * 100</pre>	muscle	mineralization		0 0 0			0 0 0 0
Significant difference; *: P ≦ 0.05 **: P ≦ 0.01 Test of Chi Square	<a>> b (c)	a: Number of animals examined at theb: Number of animals with lesionc: b / a * 100	e site				

APPENDIX L 2

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS : MALE

DEAD AND MORIBUND ANIMALS

SEX

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

: RAT F344/DuCrlCrlj[F344/DuCrj]

ANIMAL REPORT TYPE : A1 : MALE

PAGE: 1

		Group Name No. of Animals on Study	. 6	Contr	51			25 6	ppm			8	50 pj	pm			1.	100	ppm	
Organ		Grade 1 (%)	2 (%)	(%)	(%)	<u>1</u> (%)	(%)	(%)	<u>4</u> (%)	(%)	(<u>2</u> (%)	(%)	(%)	(1 %)	2 (%)	(%)	4 (%	6)
{Respiratory	system)																			
nasal cavit	thrombus	0 (0)	< 6 0 (0) (0	0 (0)	1 (17)	0	6> 0 (0)	0 (0)	0 (0)	(< 82 0 0) (0	0 (0)		3 1) ((14 0 0)	0	(0	
	eosinophilic change:olfactory epitheli		2 (33) (0 (0)	0 (0)	0 (0)	2 (33)	0 (0)	0 (0)	0 (0)		1 (3)	0 0)	0 (0)		3 1) (4 29)	0 (0)	(0	
	eosinophilic change:respiratory epithe		0 (0) (0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0)	1 (13)	(0 (0 0)	0 (0)	(1 7) (0 0)	0 (0)	(0)))
	inflammation:foreign body	0 (0)	1 (17) (0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0)	1 (13)	(0 0) (0	0 (0)	(1 7) (1 7)	0 (0)	(0)))
	respiratory metaplasia:olfactory epith	0 (0)	0 (0) (0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	(0 0) (0 0)	0 (0)	(0 0) (0 0)	0 (0)	(0)))
nasopharynx	inflammation	0 (0)	< 6 0 (0) (0	0	0 (0)	(0)	6> 0 (0)	0 (0)	0 (0)	(< 82 0 0) (0 0)	0 (0)	(-	0 0) (<1- 1 7)	0	0))))
lung	congestion	0 (0)	< 6 0 (0) (0	0	1 (17)	0		0 (0)	0 (0)		< 82 0 0) (0	0 (0)		0 0) (<1- 0 0)	0	((

Grade 1 : Slight 2 : Moderate

3 : Marked

4 : Severe

(a) b

a: Number of animals examined at the site

b: Number of animals with lesion

c:b/a*100 (c)

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

(HPT150)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

REPORT TYPE : A1 SEX

: MALE

DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Cont 6 2 3 (%) (%)	4 (%)	25 ppm 6 1 2 3 4 (%) (%) (%) (%)	50 ppm 8 1 2 3 4 (%) (%) (%)	100 ppm 14 1 2 3 4 (%) (%) (%) (%)
{Respiratory	system)						
lung	inflammation	0 (0)	< 6> 0 0 (0) (0)	0 (0)	< 6> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>	0 0 0 0 (0) (0) (0) (0)
	inflammatory infiltration	0 (0)	0 0	0 (0)	1 0 0 0 (17) (0) (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
	bronchiolar—alveolar cell hyperplasia		0 0	0 (0)	0 0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
{Hematopoietio	c system)						
oone marrow	increased hematopoiesis	1 (17)	< 6> 0 0 (0) (0)	0 (0)	<pre></pre>	\(\langle 8 \rangle \) \(1 0 0 0 \) \(13) \((0) (0) (0) \)	1 0 0 0 (7) (0) (0) (0)
	granulopoiesis:increased	(0)	0 0	0 (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
spleen	deposit of hemosiderin	1 (17)	< 6> 2 0 (33) (0)	0 (0)	< 6> 0 1 0 0 (0) (17) (0) (0)	<pre></pre>	<14> 2 4 0 0 (14) (29) (0) (0)
⟨a⟩ b	a : Number of animals examined at the s b : Number of animals with lesion c : b / a * 100		3				

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

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

/DuCrj] DEAD AND MORIBUN

REPORT TYPE : A1 SEX : MALE

PAGE: 3

Organ		p Name	25 ppm 6 1 2 3 4 (%) (%) (%) (%)	50 ppm 8 1 2 3 4 (%) (%) (%) (%)	100 ppm 14 1 2 3 4 (%) (%) (%) (%)
{Hematopoie	etic system)				
spleen	increased extramedullary hematopoiesis	<pre></pre>	(6) 1 0 0 0 (17) (0) (0) (0)	0 1 0 0 (0) (13) (0) (0)	2 4 0 0 (14) (29) (0) (0)
(Circulator	ry system)				
ieart	thrombus	< 6> 0 0 0 0 (0) (0) (0) (0)	6> 0 0 0 0 (0) (0) (0) (0)	(8> 1 0 0 0 (13) (0) (0) (0)	0 1 0 0 (0) (7) (0) (0)
	myocardial fibrosis	3 0 0 0 (50) (0) (0) (0)	2 0 0 0 0 (33) (0) (0) (0)	4 0 0 0 (50) (0) (0) (0)	8 0 0 0 (57) (0) (0) (0)
Digestive	system)				
ongue	inflammation	< 6> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>	0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (7) (0) (0) (0)
	squamous cell hyperplasia	0 0 0 0 0 (0) (0)	1 0 0 0 (17) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
Grade (a > b (c) Significant	1: Slight 2: Moderate 3: Ma a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 t difference; *: P ≤ 0.05 **: P ≤ 0.0				

(HPT150)

: RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1 SEX : MALE

ANIMAL

PAGE: 4

		Group Name Control No. of Animals on Study 6	L 25 ppm 6	50 ppm 8	100 ppm 14
rgan	Findings	Grade <u>1 2 3</u>	4 1 2 3 4 (%) (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Digestive :	system)				
tomach	ulcer:forestomach	0 1 0 (0) (17) (0) (0 2 0 0 0 0) (33) (0) (0) (0)	<pre></pre>	3 0 0 0 (21) (0) (0) (0)
	hyperplasia:forestomach	0 0 0 (0) (0) (0 1 0 0 0 0 0 0 0 0 17) (0) (0) (0)	1 0 0 0 (13) (0) (0) (0)	0 0 0 0 0 (0) (0)
	erosion:glandular stomach	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)	2 0 0 0 (14) (0) (0) (0)
	ulcer:glandular stomach	1 0 0 (17) (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)
iver	herniation	(6) 1 0 0 (17) (0) (0) (0 1 0 0 0 0) (17) (0) (0) (0)	< 8> 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 (14) (0) (0) (0)
	necrosis:central	0 0 0 0 (0) (0 1 1 0 0 0) (17) (17) (0) (0)	0 0 0 0 0 (0) (0)	1 1 0 0 (7) (7) (0) (0)
	degeneration:central	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 1 0 0 (0) (0)
	bile duct hyperplasia	2 4 0 (33) (67) (0) (0 1 4 0 0 0) (17) (67) (0) (0)	2 5 0 0 (25) (63) (0) (0)	3 9 0 0 (21) (64) (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

b

: RAT F344/DuCr1Cr1j[F344/DuCrj]

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

REPORT TYPE : A1 SEX : MALE

ANIMAL

PAGE: 5

		Group Name No. of Animals on Study Grade 1	2	Contro	4	1	9	25 p 6 3	opm 4	1		2	50 ; 8 3	ppm 4		1	2	14	00 ppr 3	m 4
)rgan	Findings	Grade <u>1</u> (%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)		(%)	(%)		(%)	(%)
Digestive s	ystem)																			
ancreas	atrophy	0 (0)	< 6 1 (17)	0	0 (0)	1 (17)	1		0 (0)	1 (13		(1 13)	0	0 (0)	(1 7)	1		0	0
	islet cell hyperplasia	0 (0)	0	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (13) (0 0)	0 (0)	0 (0)	(0 (0)	0 (0)		0 (0
Urinary sys	tem)																			
kidney	scar	1 (17)	〈 6 0 (0) (0	0 (0)	0 (0)	0 (0)	0	0 (0)	0		0 0)	0	0 (0)	(0 (0)	0		0	0
	chronic nephropathy	2 (33)	0 (0) (0 (0)	0 (0)	5 (83)	0 (0)	0 (0)	0 (0)	2 (25		0 0)	1 (13)	0 (0)	. (8 (57)	2 (14)		0 0) (0
	tubular necrosis	0 (0)	0 (0)	0	0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0) (0 0)	0 (0)	0 (0)	(0 (0)	(0)		0 0) (0
	mineralization:pelvis	0 (0)	0 (0)	0	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0		0	0 (0)	0 (0)	(1 (7)	(7)		0 0) (0
	transitional cell hyperplasia	0 (0)	0	0	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0		0 0)	0 (0)	0 (0)	(2 (14)	0 (0)		0 (0

(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

: MALE

: 0535

: RAT F344/DuCrlCrlj[F344/DuCrj]

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

ANIMAL : RAT REPORT TYPE : A1

SEX

R : A1

DEAD AND MURIBUND ANIMALS (0-105W,

Group Name Control 25 ppm 50 ppm 100 ppm No. of Animals on Study 6 14 Grade Findings_ Organ___ (%) (%) (%) (%) (%) (%) (%) (%) {Urinary system} urin bladd < 6> < 6> < 7> <14> papillary hyperplasia: transitional epithelium 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)(7)(0)(0) {Endocrine system} pituitary < 6> < 6> < 8> <14> hyperplasia 0 1 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(17)(0)(0) (13) (0) (0) (0) (0)(0)(0)(0) thyroid < 6> < 6> < 8> <14> C-cell hyperplasia 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) (7)(7)(0)(0) adrenal < 6> < 6> < 8> <14> hyperplasia:medulla 0 0 0 0 0 0 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (33) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) {Reproductive system} testis < 6> < 6> < 8> mineralization 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (7)(0)(0)(0) 1 : Slight Grade 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 ; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

STUDY NO.

ANIMAL

: 0535

: RAT F344/DuCrlCrlj[F344/DuCrj]

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

REPORT TYPE : A1 SEX : MALE

PAGE: 7 Group Name Control 25 ppm 50 ppm 100 ppm No. of Animals on Study 6 6 14 Grade 3 Findings_ Organ_ (%) (%) (%) (%) (%) (%) (%) {Reproductive system} testis < 6> < 6> < 8> <14> interstitial cell hyperplasia 0 0 0 (0)(0)(0)(0) (33) (0) (0) (0) (0)(0)(0)(0) (7)(0)(0)(0) {Special sense organs/appendage} eye < 6> < 6> < 8> <14> hemorrhage 0 0 0 0 0 (17) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) cataract 0 0 0 (17) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) (7)(0)(0)(0) retinal atrophy 0 1 0 0 0 (0)(17)(0)(0) (17) (0) (0) (0) (0)(13)(0)(0) (7)(0)(0)(0) keratitis (17) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(7)(0)(0) squamous cell metaplasia:cornea 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (7)(0)(0)(0) {Musculoskeletal system} muscle < 6> < 6> < 8> mineralization 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (13) (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:b/a*100

(c) Significant difference; $*: P \le 0.05$ $**: P \le 0.01$

Test of Chi Square

APPENDIX L 3

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS : MALE

SACRIFICED ANIMALS

STUDY NO. : 0535 REPORT TYPE : A1

SEX

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

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

: MALE

	No	oup Name , of Animals on Study	C 44	ontrol			4	25 p	pm			42	50 p	pm			3	100 ; 6	ppm
rgan	Findings	ade <u>1</u> (%)	2 (%)	3 (%)	(%)	(%)	(%)	(%)	(%)	(1 %) 	2 (%)	3 (%)	(%)	(<u>1</u> %)	2 (%)	3 (%)	(%)
Integumentar	ry system/appandage}																		
kin/app	inflammation	0 (0)	<44> 1 (2) (0	0 0)	0 (0)	1	0 (0)	0 (0)	((<42 0 0)	2> 0 (0)	0 (0)		0 0) (<3 0 0)	0	0 (0)
	squamous cell hyperplasia	0 (0)	0 (0) (0 (0 0)	1 (2)	1 (2)	0 (0)	0 (0)	(())) (1 2)	0 (0)	0 (0)	(0 0) (1 3)	0 (0)	0 (0)
	epidermal cyst	I (2)	0 (0) (0 (0 0)	0 (0)	0 (0)	0 (0)	0 (0)	(() ()	2 5)	0 (0)	0 (0)	(0 0) (2 6)	0 (0)	(0)
Respiratory	system}																		
{Respiratory s	thrombus	1 (2)	<44> 0 (0) (0	0 0)	0 (0)	0	0 (0)	0 (0))) (<42 0 0)	2> 0 (0)	0 (0)		0 0) ((3) 0 0)	0	0 (0)
	goblet cell hyperplasia	0 (0)	0 (0) (0 (0 0)	0 (0)	0 (0)	0 (0)	0 (0)	(:	I 2) (0	0 (0)	0 (0)		0 0) (0 0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium	17 (39)	15 (34) (0 (0 0)	13 (30)	19 (43)	3 (7)	0 (0)	1! (36		19 45)	3 (7)	0 (0)		7 7) (16 44)	0 (0)	0 (0)
	eosinophilic change:respiratory epitheli		0 (0) (0 (0	5 (11)	0 (0)	0 (0)	0 (0)	(0	0 (0)	0 (0)		2 6) (0 0)	0 (0)	0 (0)
Frade (a > b (c)	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100	Marked 4: Severe																	

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1
SEX : MALE

SACRIFICED ANIMALS (105W)

PAGE: 2

]	Group Name No. of Animals on Study	44				4	25	ppm		٠	42 42) ppm			3	100 6		
)rgan	Findings	Grade <u>1</u> (%)	(%)	(%)	(%)	<u>1</u> (%)	(%)	(%)	(%)	(%)	(%)) (9	8 4 (%)	•	(%)	2 (%)	(%)	ı (4 (%)
Respiratory	system}																		
nasal cavit	inflammation:foreign body	7 (16)	<441 3 (7) (0	0 0)	6 (14)	0	(4> 0 (0)	0 (0)	9 (21)	2 (5)	<42> () 0)) (0)	(3 8) (<3 0 0)	6> 0 (0)) (0 0)
	inflammation:respiratory epithelium	0 (0)	1 (2) (0 0) (0 0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)		0 0) (0)	(1 3) (0 0)	0 (0)) (0 0)
	respiratory metaplasia:olfactory epith	elium 0 (0)	0 (0) (0	0	1 (2)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)) ((0 0) (0)	(1 3) (0	(0)) (0 0)
	respiratory metaplasia:gland	7 (16)	0 (0) (0	0	5 (11)	0 (0)	0 (0)	0 (0)	5 (12)	0 (0)) ((0 0	(1 3) (0 0)	(0)) (0 0)
	squamous cell metaplasia:respiratory e	pithelium 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)
ung	inflammatory infiltration	0 (0)	<441 0 (0) (0	0 0)	0 (0)	0	0 (0)	0 (0)	1 (2)	0) 0)) (0)		1 3) (0) (0 0)
	granulomatous inflammation	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)
	accumulation of foamy cells	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)

b

b: Number of animals with lesion

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

c:b/a*100

: 0535

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

REPORT TYPE : A1 SEX : MALE

PAGE: 3

		Group Name No. of Animals on Study Grade 1	44 2	3	4	_1	4 2	3	pm 4 (%)	_1	2	42	50 ppr 3 (%)	4	_1	<i>.</i>	36	00 ppm 3	4
rgan	Findings	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%) ((%)	(%)	(%)	(9	5) ((%)	(%)
Respiratory s	system}																		
ung	bronchiolar—alveolar cell hyperplasia		<44 2 (5) (0	0 0)	2 (5)	<4 1 (2)	4> 0 (0)	0 (0)	0 (0)	0	<42>) (0 0) (0 0)	3 (8)			0 (0
Hematopoietic	e system)																		
one marrow	granulation	1 (2)	<441 0 (0) (0	0	1 (2)	<4 0 (0)	0	0 (0)	0 (0)	0	<42>) (0 0) (0	0 (0)			0 (0
	increased hematopoiesis	2 (5)	0 (0) (0 (0	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0) (0 0) (0 0)	(3)	() (0 (0
pleen	congestion	8 (18)	<44 0 (0) (0	0 0)	9 (20)	<4 0 (0)	0	0 (0)	7 (17)	0	<42>	0 0) (0	5 (14)	(0 0) (0
	deposit of hemosiderin	18 (41)	0 (0) (0	0	21 (48)	0	0 (0)	0 (0)	20 (48)	0 (0) (0 0) (0 0)	18 (50)			0 (0
	. granulation	0 (0)	0 (0) (0	0	0 (0)	0	0 (0)	0 (0)	0 (0)	0 (0		0 (0	0			0 (0

(c)

c:b/a * 100

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1

SACRIFICED ANIMALS (105W)

SEX : MALE

Organ	T.	Froup Name Control Jo. of Animals on Study 44 Frade 1 2 3 4 (%) (%) (%) (%)	25 ppm 44 1 2 3 4 (%) (%) (%) (%)	50 ppm 42 1 2 3 4 (%) (%) (%) (%)	100 ppm 36 1 2 3 4 (%) (%) (%) (%)
{Hematopoie	tic system)				
spleen	fibrosis:focal	1 0 0 0 (2) (0) (0) (0)	0 2 0 0 (0) (5) (0) (0)	0 0 0 0 (0) (0) (0) (0)	<36> 0 0 0 0 (0) (0) (0) (0)
	increased extramedullary hematopoiesis	4 2 1 0 (9) (5) (2) (0)	4 4 0 0 (9) (9) (0) (0)	2 2 0 0 (5) (5) (6) (6)	2 1 1 0 (6) (3) (3) (0)
{Circulator	y system}				
heart	thrombus	<444> 0 1 0 0 (0) (2) (0) (0)	0 0 0 0 (0) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0	<36> 0 0 0 0 (0) (0) (0) (0)
	myocardial fibrosis	19 1 0 0 (43) (2) (0) (0)	19 0 0 0 (43) (0) (0) (0)	19 1 0 0 (45) (2) (0) (0)	18 1 0 0 (50) (3) (0) (0)
	subendocardial fibrosis	1 0 0 0 0 (2) (0) (0) (0)	1 1 0 0 (2) (2) (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0)
{Digestive	system)				
tooth	epidermal cyst	<44> 0 0 0 0 0 0 0 0 0 0 0	<44> 0 1 0 0 (0) (2) (0) (0)	<42> 0 0 0 0 (0) (0) (0) (0)	36> 0 0 0 0 (0) (0) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3: a: Number of animals examined at the simble b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤				

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

REPORT TYPE : A1 SEX : MALE

PAGE: 5

Organ	Findings	Group Name Con No. of Animals on Study 44 Grade 1 2 3 (%) (%)	trol	25 ppm 44 2 3 4 (%) (%) (%)	50 ppm 42 1 2 3 4 (%) (%) (%) (%)	100 ppm 36 1 2 3 4 (%) (%) (%) (%)
{Digestive s	ystem}					
tongue	arteritis	<44> 0 0 0 0 0 0 0 0 0		<44> 0 0 0 (0) (0) (0)	<pre></pre>	<36> 0 0 0 0 (0) (0) (0) (0)
stomach	hyperplasia:glandular stomach	<44> 0 0 0 0 0 0 0 0 0		<44> 0 0 0 (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0	<36> 0 0 0 0 0 0 0 0 0 0 0
liver	herniation	<44> 6 0 0 (14) (0) (0		<44> 0 0 0 0 0 0 0 0 0) 0	3 0 0 0 (7) (0) (0) (0)	36> 3 0 0 0 (8) (0) (0) (0)
	necrosis:focal	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)
	granulation	1 1 0 (2) (2) (0	0 3	0 0 0 (0) (0)	4 0 0 0 0 (10) (0) (0)	0 0 0 0 0 (0) (0)
	inflammatory cell nest	0 0 0	0 1 (2) (1 0 0 (2) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	clear cell focus	4 3 0 (9) (7) (0	0 5	1 0 0 (2) (0) (0)	3 1 0 0 (7) (2) (0) (0)	2 3 0 0 (6) (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 b

(c) c:b/a*100

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

(HPT150)

ANIMAL

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

b: Number of animals with lesion

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

c:b/a * 100

REPORT TYPE : A1 SEX : MALE SACRIFICED ANIMALS (105W)

RAI F344/DUCTICTI][F344/DUCT]] SACKIFICED ANIMALS (

Organ	Findings	Group Name No. of Animals on Study Grade	Control 44 2 3 4 (%) (%) (%)	25 ppm 44 1 2 3 4 (%) (%) (%) (%)	50 ppm 42 1 2 3 4 (%) (%) (%) (%)	100 ppm 36 1 2 3 4 (%) (%) (%) (%)
{Digestive s	system)					
iver	acidophilic cell focus	1 (2)	<44> 0 0 0 (0) (0) (0)	1 0 0 0 (2) (0) (0) (0)	1 0 0 0 (2) (0) (0) (0)	36> 0 0 0 0 (0) (0) (0) (0)
	basophilic cell focus		1 0 0 (2) (0) (0)	1 1 0 0 (2) (2) (0) (0)	4 2 0 0 (10) (5) (0) (0)	0 1 0 0 (0) (3) (0) (0)
	mixed cell focus	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 1 0 0 (2) (2) (0) (0)	0 0 0 0 0 (0) (0)
	spongiosis hepatis	3 (7)	0 0 0 0 (0) (0)	3 0 0 0 (7) (0) (0) (0)	3 0 0 0 0 (7) (0) (0) (0)	0 1 0 0 (0) (0)
	bile duct hyperplasia	0 (0)	44 0 0 (100) (0) (0)	0 44 0 0 (0) (100) (0) (0)	1 41 0 0 (2) (98) (0) (0)	2 34 0 0 (6) (94) (0) (0)
ancreas	atrophy	17 (39)	<44> 5 0 0 (11) (0) (0)	<44> 17 5 0 0 (39) (11) (0) (0)	<42> 16 4 0 0 (38) (10) (0) (0)	<36> 10 4 0 0 (28) (11) (0) (0)
	arteritis	0 (0)	0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	islet cell hyperplasia	0 (0)	3 0 0 (7) (0) (0)	0 1 0 0 (0) (2) (0) (0)	0 0 0 0 0 (0) (0) (0)	0 1 0 0 (0) (0)

b

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

: RAT F344/DuCr1Cr1j[F344/DuCrj] ANIMAL

PAGE: 7

REPORT TYPE : A1 SEX : MALE

Organ Findings		Group Name No. of Animals on Study	Control 44	25 ppm 44	50 ppm 42	100 ppm 36
	Findings	Grade 1 (%)	2 3 4 (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
{Urinary sys	stem}					
kidney	fatty change	1 (2)	<44> 0 0 0 (0) (0) (0)	<44> 0 0 0 0 0 0 0 0 0 0 0 0	<42> 0 0 0 0 0 0 0 0 0	(36) 0 0 0 0 (0) (0) (0) (0)
	cyst	0 (0)	1 0 0 (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)
	scar	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 1 0 0 (0) (3) (0) (0)
	chronic nephropathy	13 (30)	29 0 0 (66) (0) (0)	16 25 1 0 (36) (57) (2) (0)	8 30 3 0 (19) (71) (7) (0)	13 21 2 0 (36) (58) (6) (0)
	papillary necrosis	0 (0)	1 0 0 (2) (0) (0)	0 0 0 0 0	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	mineralization:papilla	1 (2)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)
	mineralization:pelvis	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)	0 1 0 0
	transitional cell hyperplasia	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (3) (0) (0) (0)

Grade 1 : Slight 2 : Moderate

3 : Marked

4 : Severe

< a > b

a : Number of animals examined at the site

b: Number of animals with lesion

(c) c:b/a * 100

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX

: MALE

PAGE: 8

Organ	:	Group Name No. of Animals on Study Grade 1 (%)	Control 44 2 3 4 (%) (%) (%)	25 ppm 44 1 2 3 4 (%) (%) (%) (%)	50 ppm 42 (%) (%) (%) (%)	100 ppm 36 1 2 3 4 (%) (%) (%) (%)
(Urinary syst	tem}					
cidney	atypical tubule hyperplasia	1 (2)	<44> 0 0 0 0 0 0 0) (0) (0)	<44> 0 0 0 0 0 0 0 0 0 0 0 0	42> 1 0 0 0 (2) (0) (0) (0)	<36> 0 0 0 0 0 0 0 0 0 0 0 0
rin bladd	papillary hyperplasia:transitional epi		(44) 1 0 0 (2) (0) (0)	0 0 0 0 (0) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0	<35> 0 0 0 0 0 (0) (0) (0) (0)
Endocrine sy	ystem}					
pituitary	angiectasis	0 (0)	<44> 0 0 0 0 0 0 0) 0 0) 0 0)	<44> 0 0 0 0 0 0 0 0 0 0 0 0	<42> 0 0 0 0 0 0 0 0 0 0 0 0	(36) 1 0 0 0 (3) (0) (0) (0)
	cyst	1 (2)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (5) (0) (0)	1 0 0 0 0 (3) (0) (0) (0)
	hyperplasia	4 (9)	3 0 0 (7) (0) (0)	4 1 0 0 (9) (2) (0) (0)	5 3 0 0 (12) (7) (0) (0)	3 4 0 0 (8) (11) (0) (0)
	Rathke pouch	2 (5)	0 0 0 0	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (3) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤					

(HPT150)

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1

SEX

: MALE

Findings	Group Name Control No. of Animals on Study 44 Grade 1 2 3 4 (%) (%) (%) (%)	25 ppm 44 1 2 3 4 (%) (%) (%) (%)	50 ppm 42 1 2 3 4 (%) (%) (%) (%)	100 ppm 36 1 2 3 4 (%) (%) (%) (%)
tem)				
C-cell hyperplasia	9 4 0 0 (20) (9) (0) (0)	(44) 12 4 0 0 (27) (9) (0) (0)	(42) 12 6 0 0 (29) (14) (0) (0)	36> 8 4 0 0 (22) (11) (0) (0)
hyperplasia:cortical cell	<44> 0 0 0 0 0 0 0 0 0 0 0 0 0	<44> 0 0 0 0 0 0 0 0 0 0 0 0 0	<42> 1 0 0 0 (2) (0) (0) (0)	<36> 0 1 0 0 0 0) (3) (0) (0)
hyperplasia:medulla	3 4 0 0 (7) (9) (0) (0)	5 0 0 0 (11) (0) (0) (0)	4 0 0 0 0 (10) (10) (10) (10)	2 0 0 0 0 (6) (6) (0) (0)
focal fatty change:cortex	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0)
system)				
mineralization	2 0 0 0 (5) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	<42> 2 0 0 0 (5) (0) (0) (0)	36> 0 0 0 0 (0) (0) (0) (0)
arteritis	2 0 0 0 0 (5) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	cem) C-cell hyperplasia hyperplasia:cortical cell hyperplasia:medulla focal fatty change:cortex system) mineralization	No. of Animals on Study 44 Grade 1 2 3 4 (%) (%) (%) (%) (%) C-cell hyperplasia 9 4 0 0 (20) (9) (0) (0) hyperplasia:cortical cell 0 0 0 0 0 (0) (0) (0) (0) (0) hyperplasia:medulla 3 4 0 0 (7) (9) (0) (0) focal fatty change:cortex 0 0 0 0 0 (0) (0) (0) (0) system) mineralization 2 0 0 0 (5) (0) (0) (0)	No. of Animals on Study 44 Findings 12 3 4 Findings 2 3 4 Findings 2 3 4 Findings 2 3 4 Findings 2 3 4 Findings 3 4 0 0 12 4 0 0 Findings 2 44 hyperplasia:cortical cell 0 0 0 0 0 0 0 0 0 0 0 hyperplasia:medulla 3 4 0 0 5 0 0 0 0 0 0 0 Focal fatty change:cortex 0 0 0 0 0 0 0 0 0 0 focal fatty change:cortex 0 0 0 0 0 0 0 0 0 0 0 system) mineralization 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 arteritis 2 0 0 0 0 0 0 0 0 0 0 0 0 arteritis 2 0 0 0 0 0 0 0 0 0 0 0 0 0 Third Animals on Study 44 The state of the state	No. of Animals on Study

: RAT F344/DuCr1Cr1j[F344/DuCrj]

ANIMAL REPORT TYPE : A1 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

PAGE: 10

Organ	Findings	Group Name Control No. of Animals on Study 44 Grade 1 2 3 4 (%) (%) (%) (%)	25 ppm 44 1 2 3 4 (%) (%) (%) (%)	50 ppm 42 1 2 3 4 (%) (%) (%) (%)	100 ppm 36 1 2 3 4 (%) (%) (%) (%)
Reproductive	system)				
estis	interstitial cell hyperplasia	<44> 6 0 0 0 (14) (0) (0) (0)	<44> 5 0 0 0 (11) (0) (0) (0)	<42> 9 0 0 0 (21) (0) (0) (0)	<36> 2 0 0 0 (6) (0) (0) (0)
rostate	inflammation	<44> 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<44> 0 0 0 0 0 0 0 0 0 0 0 0 0	<42> 0 1 0 0 (0) (2) (0) (0)	<35> 0 0 0 0 (0) (0) (0) (0)
	hyperplasia	8 1 0 0 (18) (2) (0) (0)	7 2 0 0 (16) (5) (0) (0)	9 1 0 0 (21) (2) (0) (0)	7 0 0 0 (20) (0) (0) (0)
ammary gl	galactocele	<44> 0 0 0 0 0 0 0 0 0 0 0 0	<44\> 0 0 0 0 0 (0) (0) (0) (0)	<pre></pre>	<36> 0 0 0 0 0 0 0 0 0 0 0
Special sens	e organs/appendage}				
r e	cataract	\(\lambda 44 \rangle \) \(1 0 0 0 \\ (2) (0) (0) (0) \)	<44> 4 0 0 0 (9) (0) (0) (0)	<42> 3 0 0 0 (7) (0) (0) (0)	<36> 1 0 0 0 (3) (0) (0) (0)
	retinal atrophy	18 0 0 0 (41) (0) (0) (0)	15 4 0 0 (34) (9) (0) (0)	13 4 0 0 (31) (10) (0) (0)	11 1 0 0 (31) (3) (0) (0)

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

(HPT150)

APPENDIX L 4

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS : FEMALE

ALL ANIMALS

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX

: FEMALE

Organ	I	Group Name Control No. of Animals on Study 50 Grade 1 2 3 4 (%) (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Integumentar	ry system/appandage}				
subcutis	adhesion	(50) 0 1 0 0 (0) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	inflammation	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 0 0 (0) (2) (0) (0)
{Respiratory	system)				
nasal cavit	thrombus	(50) 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)
	goblet cell hyperplasia	1 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0	1 0 0 0 0 (2) (0) (0) (0)
	eosinophilic change:olfactory epithelic	um 6 32 11 0 (12) (64) (22) (0)	2 38 8 0 (4) (76) (16) (0)	6 29 9 0 (12) (58) (18) (0)	4 35 7 0 (8) (70) (14) (0)
	eosinophilic change:respiratory epithe	11 0 0 0 0 (22) (0) (0) (0)	14 0 0 0 (28) (0) (0) (0)	13 0 0 0 (26) (0) (0) (0)	8 0 0 0 0 (16) (0) (0)
	inflammation:foreign body	2 0 0 0 0 (4) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)

< a >

a : Number of animals examined at the site

b: Number of animals with lesion

(c)

c:b/a * 100

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

ANIMAL : RAT F344/DuCr1Crlj[F344/DuCrj]
REPORT TYPE : A1

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

SEX

: FEMALE

PAGE: 15

Organ	1	lo. of Animals on Study 50 grade 1 2	3 4 1 (%)	25 ppm 50 2 3 4 (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%)
{Respiratory	system)					
nasal cavit	inflammation:respiratory epithelium	(50) 0 1 (0)(2)(0 0 0 0	<50> 0 0 0 (0) (0) (0)	(0) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)
	respiratory metaplasia:gland	3 0 (6) (0) (0 0 3	0 0 0 0 (0) (0)	5 0 0 0 (10) (0) (0) (0)	3 0 0 0 0 (6) (6) (0) (0)
larynx	inflammation	<50> 0 0 (0) (0) (0 0 0 0	<50> 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
lung	inflammatory infiltration	<50> 1 0 (2) (0) (0 0 0 0	<50> 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)
	inflammation:foreign body	0 0 (0) (0 0 0 0	0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)
{Hematopoietion	c system}					
bone marrow	granulation	(50) 4 1 (8) (2) (0 0 4	(50) 0 0 0 (0) (0) (0)	(50) 6 1 0 0 (12) (2) (0) (0)	(50) 2 1 0 0 (4) (2) (0) (0)
	a : Number of animals examined at the sit b : Number of animals with lesion c : b / a * 100					

(HPT150)

BAIS4

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] ALL ANIMALS (0-105\)

REPORT TYPE : A1

SEX

: FEMALE

PAGE: 16

Organ	Group No. o Grade	f Animals on Study 50	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Hematopoiet	tic system}				
bone marrow	increased hematopoiesis	3 0 0 0 (6) (0) (0) (0)	2 0 0 0 (4) (0) (0) (0)	<50> 6 0 0 0 (12) (0) (0) (0)	<pre></pre>
	granulopoiesis:increased	1 0 0 0 0 (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)
spleen	congestion	<50> 2 0 0 0 (4) (0) (0) (0)	<50> 4 0 0 0 (8) (0) (0) (0)	3 0 0 0 (6) (0) (0) (0)	3 0 0 0 (6) (0) (0) (0)
	deposit of hemosiderin	11 26 0 0 (22) (52) (0) (0)	17 24 0 0 (34) (48) (0) (0)	15 17 0 0 (30) (34) (0) (0)	8 24 0 0 (16) (48) (0) (0)
	increased extramedullary hematopoiesis	7 2 3 0 (14) (4) (6) (0)	5 1 0 0 (10) (2) (0) (0)	5 5 1 0 (10) (10) (2) (0)	8 3 1 0 (16) (6) (2) (0)
[Circulator:	y system)				
neart	thrombus	<50> 1 1 0 0 (2) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 1 2 0 0 (2) (4) (0) (0)
Grade <a> b (c)	1: Slight 2: Moderate 3: Mar a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100 difference; *: P ≤ 0.05 **: P ≤ 0.0				

(HPT150)

BAIS4

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCr1Cr1j[F344/DuCrj]

ALL ANIMALS (0-105W)

ANIMAL REPORT TYPE : A1 : FEMALE SEX

)rgan	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 50 2 3 4 (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
(Circulator	y system}					
neart	inflammatory cell nest	0 (0)	<50> 1 0 0 (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)
	myocardial fibrosis	12 (24)	0 0 0 0 (0) (0)	8 0 0 0 (16) (0) (0) (0)	7 0 0 0 (14) (0) (0) (0)	8 0 0 0 (16) (0) (0) (0)
	subendocardial fibrosis	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 (0) (0)
Digestive	system}					
tomach	erosion:forestomach	0 (0)	<50> 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 2 0 0 0 (4) (0) (0) (0)
	ulcer:forestomach	2 (4)	2 0 0 (4) (0) (0)	0 1 0 0 (0) (2) (0) (0)	1 2 0 0 (2) (4) (0) (0)	1 3 0 0 (2) (6) (0) (0)
	hyperplasia:forestomach	2 (4)	1 0 0 (2) (0) (0)	1 2 0 0 (2) (4) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 1 0 0 (0) (0)
	erosion:glandular stomach	1 (2)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)	0 0 0 0 0 (0) (0) (0)	3 0 0 0 0 (6) (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 \leq 0.05 ** : P \leq 0.01 Test of Chi Square

(HPT150)

BAIS4

ANIMAL

SEX

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCr1Cr1j[F344/DuCrj]

ALL ANIMALS (0-105W)

REPORT TYPE : A1 : FEMALE

PAGE: 18

		Group Name No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
Organ	Findings	Grade <u>1</u> (%)	2 3 4 (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
{Digestive sy	stem)					
stomach	ulcer:glandular stomach	0 (0)	<50> 0 0 0 (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	hyperplasia:glandular stomach	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	0 0 0 0 0 (0) (0)
large intes	inflammation	0 (0)	<50> 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
liver	herniation	11 (22)	<50> 0 0 0 (0) (0) (0)	<50> 9 0 0 0 (18) (0) (0) (0)	<50> 7	<50> 9 0 0 0 (18) (0) (0) (0)
	necrosis:central	(2)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 1 0 0 (2) (2) (0) (0)	1 0 0 0 (2) (0) (0) (0)
	necrosis:focal	0 (0)	0 0 0 0 (0) (0)	0 1 0 0 (0) (2) (0) (0)	0 0 0 0 0 (0) (0)	0 1 0 0 (0) (2) (0) (0)
	fatty change	2 (4)	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 ; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

ANIMAL

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 : FEMALE SEX

PAGE: 19

Organ	Findings	Group Name No. of Animals on Study Grade(%)	50 2	ntrol 3 4 %) (%)	1 2 (%) (%)	25 pp 50 3 (%)	9m 4 (%)	1 (%)	50 2 (%)	50 pp 3 (%)	om 4 (%)	1 (%)	2	50 2	00 ppn 3 (%)	m 4 (%)
{Digestive	system)															
liver	$ ext{degeneration:} ext{central}$	0 (0)	<50> 0 (0) (0 0	0 0 (0) (0)	50> 0 (0)	0 (0)	0 (0) (<50 0 0) (0	0 (0)	1 (2)	0		0 (0 0)
	granulation	8 (16)	3 (6) (0 0	8 5 (16) (10)	0 (0)	0 (0)	6 (12) (3 6) (0 (0) (0 (0)	8 (16)			0 (0 0)
	fibrosis	0 (0)	0 (0 0	0 0	0 (0)	0 (0)	1 (2) (0	0 (0) (0	0 (0)	0)		0 (0 0)
	clear cell focus	2 (4)	0 (0 0	0 1 (0) (2)	0 (0)	0 (0)	0 (0) (0	0 (0) (0 (0)	0 (0)	1 (2		0 (0 0)
	acidophilic cell focus	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)
	basophilic cell focus	23 (46)	3 (6) (0 0	20 1 (40) (2)	0 (0)	0 (0)	18 (36) (1 2)	0 (0) (0 (0)	21 (42)	1 (2		0 (0 0)
	bile duct hyperplasia	8 (16)	1 (2) (0 0	4 7 (8) (14)	0 (0)	0 (0)	7 (14) (4 8)	0 (0) (0 (0)	3 (6)	3 (6	; ;) (0 (0 0)
pancreas	atrophy	1 (2)	<50> 4 (8) (0 0 0) (0)	4 0 (8) (0)	50> 0 (0)	0 (0)	3 (6) (<50 1 2)	0	0	5 (10)	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; $*: P \le 0.05$ **: $P \le 0.01$ Test of Chi Square

(HPT150)

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj] ANIMAL REPORT TYPE : A1 SEX : FEMALE

ALL ANIMALS (0-105W)

PAGE: 20

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 50 2 3 4 (%) (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Digestive s	system)					
pancreas	islet cell hyperplasia	0 (0) (<50> 0 0 0 0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)
{Urinary sys	stem)					
kidney	cyst	0 (0) (<50> 0 0 0 0) (0) (0)	<50> 0 1 0 0 0 0 (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
	deposit of hemosiderin	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 0 0 0 0 (2) (0) (0)	0 0 0 0 0 (0) (0)
	inflammatory cell nest	0 (0) (1 0 0 2) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	chronic nephropathy	12 (24) (2 0 0 4) (0) (0)	17 2 0 0 (34) (4) (0) (0)	18 1 0 0 (36) (2) (0) (0)	18 3 0 0 (36) (6) (0) (0)
	tubular necrosis	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)	1 0 0 0 0 (2) (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	1 0 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (2) (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 \leq 0.05 ** : P \leq 0.01 Test of Chi Square

ANIMAL

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

ALL ANIMALS (0-105W)

REPORT TYPE: A1 SEX : FEMALE

Group Name Control 25 ppm 50 ppm 100 ppm No. of Animals on Study 50 50 50 Grade Organ____ Findings_ (%) (%) (%) (%) (%) (%) {Urinary system} kidney <50> <50> mineralization:pelvis 0 0 0 (4)(0)(0)(0) (0)(0)(0)(0) (2)(0)(0)(0) (4)(0)(0)(0) desquamation:pelvis 0 0 (0)(2)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) transitional cell hyperplasia (0)(0)(0)(0) (0)(2)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) atypical tubule hyperplasia 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (4)(0)(0)(0) dilated pelvis 0 0 0 0 (4)(0)(0)(0) (0)(0)(0)(0) (0)(4)(0)(0) (0)(0)(0)(0) urin bladd <50> <50≻ <50> nodular hyperplasia:transitional epithelium 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (2)(0)(0)(0) (0)(0)(0)(0) (Endocrine system) pituitary <50> <50> <50> <50> angiectasis 0 (6)(0)(0)(0) (0)(2)(0)(0) (0)(0)(0)(0) (4)(0)(0)(0) 1 : Slight Grade 2 : Moderate 3 : Marked 4 : Severe a: Number of animals examined at the site (a) 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

: RAT F344/DuCr1Cr1j[F344/DuCrj]

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

ANIMAL REPORT TYPE : A1

SEX

: FEMALE PAGE: 22

		Group Name No. of Animals on Study Grade 1	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
rgan	Findings		2 · 3 · 4 (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Endocrine sy	stem}					
oituitary	cyst	4 (8) (<50> 0 0 0 0) (0) (0)	3 0 0 0 (6) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	3 0 0 0 (6) (0) (0) (0)
	hyperplasia	7 (14) (4 0 0 8) (0) (0)	6 2 0 0 (12) (4) (0) (0)	5 4 0 0 (10) (8) (0) (0)	9 5 0 0 (18) (10) (0) (0)
	Rathke pouch		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 0 (0) (0)
hyroid	C-cell hyperplasia	7 (14) (<50> 5 0 0 10) (0) (0)	<50> 5 5 0 0 (10) (10) (0) (0)	<50> 6 3 0 0 (12) (6) (0) (0)	<50> 5 3 0 0 (10) (6) (0) (0)
drenal	hyperplasia:cortical cell	0 (0) (<50> 0 0 0 0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 2 0 0 0 (4) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)
	hyperplasia:medulla	0 (0) (0 0 0 0 0 0 0 0 0 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)	1 2 0 0 (2) (4) (0) (0)
	focal fatty change:cortex	4 (8) (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 0 0 (2) (2) (0) (0)	4 1 0 0 (8) (2) (0) (0)	4 0 0 0 0 (8) (0) (0) (0)

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)

BAIS4

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj] ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX

ANIMAL

: FEMALE

PAGE: 23

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50 2 3 4 (%) (%)	25 ppm 50 1 2 3 4 (%) (%) (%) (%)	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4 (%) (%) (%) (%)
Reproductive	system)					
ary ary	cyst	2 0	<50> 0 0 0 0) (0) (0)	(50) 6 0 0 0 (12) (0) (0) (0)	<pre></pre>	<pre></pre>
cerus	fibrosis	0 0	<50> 0 0 0 0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 0 0 0 0 0 0 0
	hyperplasia:epithelium	0 (0 0 0	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	2 0 0 0 0 (4) (0) (0) (0)
	hyperplasia:gland	0 (0 0 0	1 0 0 0 0 (2) (0) (0)	1 1 0 0 (2) (2) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	cystic endometrial hyperplasia	1 (2) (3)	0 0 0	4 0 0 0 0 (8) (0) (0) (0)	0 0 0 0 0 (0) (0)	4 0 0 0 (8) (0) (0) (0)
ummary gl	galactocele	0 0	<50>) 0 0)) (0) (0)	(50) 0 1 0 0 (0) (2) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
Special sens	e organs/appendage)					
7 e	cataract		<50> 0 0 0 0) (0) (0)	(50) 4 0 0 0 (8) (0) (0) (0)	<50> 7 0 0 0 (14) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCr1Cr1j[F344/DuCrj]

ANIMAL REPORT TYPE : A1 SEX : FEMALE ALL ANIMALS (0-105W)

PAGE: 24

	N G	roup Name Cont o. of Animals on Study 50 rade <u>1 2 3</u>	4 1	25 ppm 50 2 3 4	50 ppm 50 1 2 3 4 (%) (%) (%) (%)	100 ppm 50 1 2 3 4
Organ	Findings	(%) (%) (%)	(%) (%) (%) (%) (%)	(%) (%) (%)	(%) (%) (%)
{Special sen	se organs/appendage}					
эуө	retinal atrophy	\(\lambda 50 \rangle \) 14	0 15 (0) (30) (<50> 3 0 0 6) (0) (0) (1	<50> 8 5 0 0 16) (10) (0) (0)	<50> 11 0 0 0 * (22) (0) (0) (0)
nasolacr d	inflammation	(50) 1 0 0 (2) (0) (0)	0 0 (0) (<50> 0 0 0 0) (0) (0) (<50> 0 0 0 0 0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
{Musculoskel	etal system)					
nuscle	mineralization	<50> 0 0 0 (0) (0) (0)		<50> 0 0 0 0) (0) (0) (<50> 0 0 0 0 0) (0) (0) (0)	2 0 0 0 (4) (0) (0) (0)
bone	osteosclerosis	4 0 0 (8) (0) (0)		<50> 3	<50> 4 1 0 0 8) (2) (0) (0)	50> 5 1 0 0 (10) (2) (0) (0)
{Body caviti	es}					
mediastinum	inflammatory infiltration	(50) 0 0 0 (0) (0) (0)	0 0 0 (0) (<50> 0 0 0 0) (0) (0) (<50> 0 0 0 0 0) (0) (0) (0)	\$50> 1 1 0 0 (2) (2) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3: a: Number of animals examined at the sit b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤					

(HPT150)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX

: FEMALE

PAGE: 25

		Group Name No. of Animals on Study		Control udy 50			25 ppm 50			50 ppm 50					100 ppm 50					
organ	Findings	Grade	(%)	(%)	3 (%)	(%)	(%)	(%)	3 (%)	(%)	(%)	2 (%			<u>4</u> (%)	(5	1 %) —	2 (%)	3 (%)	(%)
Body cavities)	F																			
eritoneum	adhesion		0 (0)	<50 0 (0) ()> 0 (0)	0 (0)	0 (0)	0	0 (0)	0 (0)	1 (2)	0 (0			0 0)))) (<50 0 0)	0 (0)	0 (0)
(a) a b b (c) c	1: Slight 2: Moderate a: Number of animals examined a b: Number of animals with lesion: b / a * 100 fference; *: P ≤ 0.05		4 : Severe																	

APPENDIX L 5

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS : FEMALE

DEAD AND MORIBUND ANIMALS

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX : FEMALE

ANIMAL

DEAD AND MORIBUND ANIMALS (0-105W)

)rgan	No	oup Name	26 ppm 5 - 1 2 3 4 (%) (%) (%) (%)	14 14 12 3 4 (%) (%) (%) (%)	100 ppm 111 1 2 3 4 (%) (%) (%) (%)
Integumenta	ry system/appandage}				
ubcutis	adhesion	<13> 0 1 0 0 (0) (8) (0) (0)	<pre></pre>	0 0 0 0 (0) (0) (0) (0)	<11> 0 0 0 0 0 0 0 0 0 0 0 0
	inflammation	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 1 0 0 (0) (0)
Respiratory	system)				
asal cavit	thrombus	\(\lambda 13 \rangle \) \(1 0 0 \) \(8) \(0) \(0) \(0) \)	(5) 0 0 0 0 (0) (0) (0) (0)	<14> 0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (9) (0) (0) (0
	eosinophilic change:olfactory epithelium	4 8 1 0 (31) (62) (8) (0)	0 4 0 0 (0) (80) (0) (0)	2 5 1 0 (14) (36) (7) (0)	1 5 1 0 (9) (45) (9) (0
	eosinophilic change:respiratory epitheli	1 0 0 0 (8)(0)(0)(0)	1 0 0 0 (20) (0) (0) (0)	2 0 0 0 0 (14) (0) (0)	0 0 0 0 0 (0) (0) (0
	inflammation:respiratory epithelium	0 1 0 0 (0) (0)		0 0 0 0 0 (0)	0 1 0 0 (0) (0) (0
	respiratory metaplasia:gland	0 0 0 0 0 (0) (0) (0)		1 0 0 0 (7) (0) (0) (0)	0 0 0 0 0 (0) (0) (0

1 : Slight Grade 2 : Moderate

< 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

3 : Marked

4 : Severe

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1
SEX : FEMALE

		Group Name No. of Animals on Study	Control	25 ppm 5	50 ppm	100 ppm 11
rgan	Findings		2 3 4 %) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Respiratory s	system}					
arynx	inflammation		<13> 0 0 0 0) (0) (0)	<pre></pre>	0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (9) (0) (0) (0)
ing	inflammatory infiltration		<13> 0 0 0 0) (0) (0)	<pre></pre>	<14> 0 0 0 0 0 0 0 0 0	<11> 0 1 0 0 (0) (9) (0) (0)
	inflammation:foreign body		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 0 0 0 0 (7) (0) (0) (0)	0 0 0 0 0 (0) (0)
lematopoietic	system}					
one marrow	increased hematopoiesis	-	<13> 0 0 0 0) (0) (0)	< 5> 0 0 0 0 0 (0) (0) (0) (0)	\$\\ \frac{\lambda 14\rangle}{5} 0 0 \\ \lambda 36\rangle (0) (0) (0) \end{arrange}	2 0 0 0 (18) (0) (0) (0)
	granulopoiesis:increased		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 0
pleen	deposit of hemosiderin		<13> 3 0 0 3) (0) (0)	< 5> 0 3 0 0 (0) (60) (0) (0)	<14> 4 2 0 0 (29) (14) (0) (0)	<11> 0 3 0 0 0 0 (27) (0) (0)

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX : FEMALE DEAD AND MORIBUND ANIMALS (0-105W)

PAGE: 10

		Group Name No. of Animals on Study Grade 1	Control 13 2 3 4	25 ppm 5 1 2 3 4	50 ppm 14 1 2 3 4	100 ppm 11 1 2 3 4
Organ	Findings	Grade <u>1</u> (%)	(%) (%) (%)	(%) (%) (%)	(%) (%) (%)	(%) (%) (%) (%)
{Hematopoiet	ic system)					
spleen	increased extramedullary hematopoies		<13> 1 3 0 8) (23) (0)	< 5> 0 0 0 0 (0) (0) (0) (0)	(14> 0 4 1 0 * (0) (29) (7) (0)	(11) 0 2 1 0 (0) (18) (9) (0)
{Circulatory	system}					
heart	thrombus	(8) (<13> 1 0 0 8) (0) (0)	< 5> 0 0 0 0 0 0 0 0 0 0 0 0	<14> 0 0 0 0 0 (0) (0) (0) (0)	1 2 0 0 (9) (18) (0) (0)
	inflammatory cell nest	0 (0) (1 0 0 8) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (9) (0) (0) (0)
	myocardial fibrosis	3 (23) (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)	1 0 0 0 0 (9) (0) (0)
{Digestive s	ystem)					
stomach	erosion:forestomach	0 (0) (<13> 0 0 0 0) (0) (0)	< 5> 0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (7) (0) (0) (0)	2 0 0 0 (18) (0) (0) (0)

(HPT150)

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 SEX

: FEMALE

DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name No. of Animals on Study Grade (%)	Control 13 2 3 4 (%) (%) (%)	25 ppm 5 1 2 3 4 (%) (%) (%) (%)	50 ppm 14 1 2 3 4 (%) (%) (%)	100 ppm 11 1 2 3 4 (%) (%) (%) (%)
{Digestive :	svstem}					
stomach	ulcer:forestomach	2 (15)	<13> 2 0 0 (15) (·0) (0)	(5) 0 1 0 0 (0) (20) (0) (0)	<14> 1 1 0 0 (7) (7) (0) (0)	<11> 1 3 0 0 (9) (27) (0) (0)
	hyperplasia:forestomach	2 (15)	1 0 0 (8) (0) (0)	1 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 1 0 0 (0) (0)
	erosion:glandular stomach	1 (8)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	3 0 0 0 (27) (0) (0) (0)
	ulcer:glandular stomach	0 (0)	0 0 0 0 (0) (0)	1 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	hyperplasia:glandular stomach	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)	0 0 0 0 0 (0) (0)
liver	herniation	5 (38)	<13> 0 0 0 (0) (0) (0)	<pre></pre>	4 0 0 0 (29) (0) (0) (0)	\(\lambda 1 \) \(1 \) \(0 \) \(0 \) \(0 \) \(0 \) \(0 \)
	necrosis:central	1 (8)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 1 0 0 (7) (7) (0) (0)	1 0 0 0 0 (9) (0) (0)
	necrosis:focal	0 (0)	0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)	0 0 0 0 0 (0) (0)	0 1 0 0 (0) (9) (0) (0)

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

(c) c:b/a * 100

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

(HPT150)

BAIS4

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj] DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX : FEMALE I][L944\Dackl]] DEWN WIND WIGHTONIN WAITWET? (O-I

Organ	Findings	Group Name Control No. of Animals on Study 13 Grade 1 2 3 4 (%) (%) (%) (%)	25 ppm 5 1 2 3 4 (%) (%) (%) (%)	50 ppm 14 1 2 3 4 (%) (%) (%) (%)	100 ppm 11 1 2 3 4 (%) (%) (%) (%)
{Digestive	system)				
liver	fatty change	1 0 0 0 (8) (0) (0) (0)	(5> 0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	(11) 0 0 0 0 (0) (0) (0) (0)
	degeneration:central	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)	1 0 0 0 0 (9) (0) (0)
	basophilic cell focus	2 0 0 0 (15) (0) (0) (0)	1 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	bile duct hyperplasia	2 0 0 0 (15) (0) (0) (0)	1 1 0 0 (20) (20) (0) (0)	1 1 0 0 (7) (7) (0) (0)	1 2 0 0 (9) (18) (0) (0)
pancreas	atrophy	0 1 0 0 (0) (8) (0) (0)	(5> 1 0 0 0 (20) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	2 0 0 0 (18) (0) (0) (0)
{Urinary sy	stem}				
kidney	deposit of hemosiderin	<13> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>	1 0 0 0 (7) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the s b: Number of animals with lesion c: b/a * 100 difference; *: P ≤ 0.05 **: P;				

(HPT150)

: RAT F344/DuCr1Cr1j[F344/DuCrj]

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

REPORT TYPE : A1 SEX

ANIMAL

: FEMALE

Organ		oup Name Control of Animals on Study 13 dde 1 2 3 4 (%) (%) (%) (%)	25 ppm 5 1 2 3 4 (%) (%) (%) (%)	50 ppm 14 1 2 3 4 (%) (%) (%) (%)	100 ppm 11 1 2 3 4 (%) (%) (%) (%)
Urinary syst	tem)				
idney	inflammatory cell nest	<13> 0 1 0 0 (0) (8) (0) (0)	< 5> 0 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 0 0 0 0
	chronic nephropathy	0 1 0 0 (0) (8) (0) (0)	1 0 0 0 0 (20) (0) (0)	1 1 0 0 (7)(7)(0)(0)	0 0 0 0 0 (0) (0)
	tubular necrosis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 (0) (0) (0)	1 0 0 0 (9) (0) (0) (0)
	mineralization: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)	1 0 0 0 (9) (0) (0) (0)
	transitional cell hyperplasia	0 0 0 0 0 (0) (0) (0)	0 1 0 0 (0) (20) (0) (0)	0 0 0 0 0 (0) (0) (0)	0 0 0 0 0 (0) (0) (0)
	dilated pelvis	2 0 0 0 (15) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 2 0 0 (0) (14) (0) (0)	0 0 0 0 0 (0) (0) (0)
rin bladd	nodular hyperplasia:transitional epithel:	<13> ium 0 0 0 0 (0) (0) (0) (0)	< 5> 0 0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (7) (0) (0) (0)	<11> 0 0 0 0 0 0 0 0 0 0 0 0
Endocrine s	ystem}				
ituitary	angiectasis	<13> 2 0 0 0 (15) (0) (0) (0)	< 5> 0 0 0 0 (0) (0) (0) (0)	<14> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<11> 2 0 0 0 (18) (0) (0) (0)

1 : Slight Grade

b

2 : Moderate

4 : Severe

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

b: Number of animals with lesion

c:b/a * 100

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

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 SEX

ANIMAL

: FEMALE

DEAD AND MORIBUND ANIMALS (0-105W)

Group Name Control 25 ppm 50 ppm 100 ppm No. of Animals on Study 13 5 14 11 Grade Organ_ Findings_ (%) (%) (%) (%) (%) (%) (%) (%) (%) {Endocrine system} pituitary <13> < 5> <14> <11> cyst 0 0 0 (8)(0)(0)(0) (20) (0) (0) (0) (7)(0)(0)(0) (9)(0)(0)(0) hyperplasia 0 0 0 0 0 0 0 1 0 0 0 (0)(8)(0)(0) (0)(0)(0)(0) (7)(0)(0)(0) (9)(9)(0)(0) Rathke pouch (8)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) thyroid <13> < 5> <14> <11> C-cell hyperplasia 0 0 0 1 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(7)(0)(0) (0)(0)(0)(0) adrenal <13> < 5> <14> <11> hyperplasia:cortical cell 0 0 0 1 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(9)(0)(0) focal fatty change:cortex (8)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) {Reproductive system} ovary <13> < 5> <14> <11> 0 0 0 0 0 0 0 0 0 0 cyst (0)(0)(0)(0) (20) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) 1 : Slight 2 : Moderate Grade 3 : Marked 4 : Severe <a>> a: Number of animals examined at the site b

(c)

b: Number of animals with lesion

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

c:b/a * 100

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1

ANIMAL

: FEMALE

DEAD AND MORIBUND ANIMALS (0-105W)

25 ppm Group Name Control 50 ppm 100 ppm No. of Animals on Study 13 5 14 11 3 3 3 (%) (%) (%) Organ____ Findings_ (%) (%) (%) (%) (%) (%) (%) (%) {Reproductive system} uterus <13> < 5> <14> <11> cystic endometrial hyperplasia 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (18) (0) (0) (0) {Special sense organs/appendage} eye <13> < 5> <14> <11> 0 0 0 1 0 0 0 0 0 0 cataract 0 0 0 0 (0)(0)(0)(0) (20) (0) (0) (0) (14) (0) (0) (0) (0)(0)(0)(0) retinal atrophy 0 0 1 (0)(20)(0)(0) (0)(7)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) <13> nasolacr d < 5> <14> <11> inflammation 1 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)(0) {Musculoskeletal system} <13> < 5> <11> muscle mineralization 0 0 0 0 0 0 0 0 0 0 (18) (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; *: $P \le 0.05$ **: $P \le 0.01$ Test of Chi Square

(HPT150)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

: FEMALE

		oup Name of Animals on Study	Co 13	ontrol		!	25 ppm		14	50 ppr	n			100 r	pm
)rgan	Findings			3 4 (%) (%)	<u>1</u> (%)	(%)	3 <u>4</u> (%) (%)	(%)	(%)	3 (%)	(%)	<u>1</u> (%)	(%)	(%)	(%)
Musculoskelet	tal system)														
oone	osteosclerosis	1 (8)	<13> 0 (0) (0 0	0 (0)	0 (0)		(7) (<140 0 (0) (0	1 (9)	0 (0)	0 (0)	0 (0)
Body cavities	s)														
ediastinum	inflammatory infiltration	0 (0)		0 0 0 0) (0)	0 (0)	0 (0)	5> 0 0 (0)(0)	0 (0) (<14) 0 (0) (> 0 0) (0	1 (9)	1	0 (0)	0 (0)
<a>> b (c)	1: Slight 2: Moderate 3: 1 a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 ifference; *: P ≤ 0.05 **: P ≤ 0.	Marked 4: Severe													
(HPT150)															F

APPENDIX L 6

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS : FEMALE

SACRIFICED ANIMALS

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCr1Cr1j[F344/DuCrj] SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

ANIMAL

SEX

: FEMALE

	Group Name	Con 37	ntrol		25 p 4 5	pm		36	50 pp	m		4	100 p 9	mqc
indings	No. of Animals on Study Grade 1 (%)	2 3		<u>1</u> (%) (2 3	<u>4</u> (%)	(%)	2 (%)	3 (%)	<u>4</u> (%)	(%)	2 (%)	(%)	(%)
em}														
oblet cell hyperplasia	1 (3)					0 (0)	0 (0)	0	0	0 ()	1 (3)	0	0	0 (0)
osinophilic change:olfactory epithe	lium 2 (5)			2 3	64 8 (6) (18)	0 (0)	4 (11)	24 (67) (8 22) (0 (0)	3 (8)	30 (77)	6 (15)	0 (0)
osinophilic change:respiratory epit	helium 10 (27)	0 (0 0	13 (29) (0 0	0 (0)	11 (31)	0 (0) (0 (0 (0)	8 (21)	0 (0)	0 (0)	0 (0)
nflammation:foreign body	2 (5)	0 (0 0	0 (0) (0 0	0 (0)	0 (0)	(0) (0 (0) (0 (0)	(3)	(0)	0 (0)	0 (0)
espiratory metaplasia:gland	3 (8)			2 (4) (0 0	0 (0)	4 (11)	0 (0) (0 (0) (0 (0)	3 (8)	0 (0)	0 (0)	(0)
nflammatory infiltration	1 (· · 3)			0 (0) (<45> 0 0 0) (0)	0 (0)	0 (0)	0	0	0 .	0 (0)	0	0	0 (0)
rstem}														
granulation	4 (11)			4 (9) (<45> 0 0 0) (0)	0 (0)	6 (17)	1	0	0 (0)	2 (5)	1	0	0 (0)
i		sem) soblet cell hyperplasia 1 sosinophilic change:olfactory epithelium 2 sosinophilic change:respiratory epithelium 10 (27) inflammation:foreign body 2 respiratory metaplasia:gland 3 (8) inflammatory infiltration 1 (3)	Sindings	Sindings (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	Sindings	Sindings	Simple S	State Stat	Sindings	Sindings Sk) (k) (k) (k) (k) (k) (k) (k) (k) (k) (Signature Sign	Sindings	Sindings	Sindings

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1

SEX : FEMALE

Organ		p Name	25 ppm 45 1 2 3 4 (%) (%) (%) (%)	50 ppm 36 1 2 3 4 (%) (%) (%) (%)	100 ppm 39 1 2 3 4 (%) (%) (%) (%)
{Hematopoieti	ic system)				
oone marrow	increased hematopoiesis	37> 0 0 0 0 (0) (0) (0) (0)	2 0 0 0 (4) (0) (0) (0)	36> 1 0 0 0 (3) (0) (0) (0)	39> 1 0 0 0 (3) (0) (0) (0)
spleen	congestion	37> 2 0 0 0 (5) (0) (0) (0)	445> 4 0 0 0 (9) (0) (0) (0)	<36> 3 0 0 0 (8) (0) (0) (0)	<39> 3 0 0 0 (8) (0) (0) (0)
	deposit of hemosiderin	10 23 0 0 (27) (62) (0) (0)	17 21 0 0 (38) (47) (0) (0)	11 15 0 0 (31) (42) (0) (0)	8 21 0 0 (21) (54) (0) (0)
	increased extramedullary hematopoiesis	3 1 0 0 (8) (3) (0) (0)	5 1 0 0 (11) (2) (0) (0)	5 1 0 0 (14) (3) (0) (0)	8 1 0 0 (21) (3) (0) (0)
(Circulatory	system)				
eart	myocardial fibrosis	37> 9 0 0 0 (24) (0) (0) (0)	<45> 8 0 0 0 (18) (0) (0) (0)	36> 7 0 0 0 (19) (0) (0) (0)	<39> 7 0 0 0 (18) (0) (0) (0)
	subendocardial fibrosis	0 0 0 0 0 (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (-0) (-0)	0 0 0 0 0 (0) (0) (0)
Grade (a > b (c)	1: Slight 2: Moderate 3: Ma : Number of animals examined at the site b: Number of animals with lesion c: b / a * 100	arked 4 : Severe			

(HPT150)

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] REPORT TYPE : A1

SEX : FEMALE

PAGE: 13

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 37 2 3 4 (%) (%) (%)	25 ppm 45 1 2 3 4 (%) (%) (%) (%)	50 ppm 36 1 2 3 4 (%) (%) (%) (%)	100 ppm 39 1 2 3 4 (%) (%) (%) (%)
{Digestive sy	rstem)					
stomach	ulcer:forestomach	0 (0)	<37> 0 0 0 (0) (0) (0)	<45> 0 0 0 0 0 0 0 0 0 0 0	<36> 0 1 0 0 (0) (3) (0) (0)	<39> 0 0 0 0 0 0 0 0 0
	hyperplasia:forestomach	0 (0)	0 0 0 0 (0) (0)	0 2 0 0 (0) (4) (0) (0)	1 0 0 0 0 (3) (0) (0) (0)	0 0 0 0 0 (0) (0)
	hyperplasia:glandular stomach	0 (0)	0 0 0 0 (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) (0)
large intes	inflammation	0 (0)	<37> 0 0 0 (0) (0) (0)	<45> 0 0 0 0 0 0 0 0 0) (0) (0) (0)	<36> 0 1 0 0 (0) (3) (0) (0)	39> 0 0 0 0 (0) (0) (0) (0)
liver	herniation	6 (16)	<37> 0 0 0 (0) (0) (0)	<45> 8 0 0 0 (18) (0) (0) (0)	3 0 0 0 (8) (0) (0) (0)	<39> 8 0 0 0 (21) (0) (0) (0)
	necrosis:focal	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) (0)
	fatty change	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)

Grade 1 : Slight 2 : Moderate

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

b: Number of animals with lesion b

(c) c:b/a * 100

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

3 : Marked

4 : Severe

(HPT150)

BAIS4

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

: RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1

ANIMAL

SEX

: FEMALE

SACRIFICED ANIMALS (105W)

PAGE: 14 Group Name 25 ppm 50 ppm Control 100 ppm No. of Animals on Study 36 39 Grade Organ_ Findings_ (%) (%) (%) (%) (%) {Digestive system} liver <37> <45> <36> <39> granulation 3 0 0 4 0 0 0 0 (22) (8) (0) (0) (18) (11) (0) (0) (17) (8) (0) (0) (21) (10) (0) (0) fibrosis 0 (0)(0)(0)(0) (0)(0)(0)(0) (3)(0)(0)(0) (0)(0)(0)(0) clear cell focus 0 (5)(0)(0)(0) (0)(2)(0)(0) (0)(0)(0)(0) (0)(3)(0)(0) acidophilic cell focus 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(3)(0)(0) basophilic cell focus 19 18 0 1 (42) (2) (0) (0) (54) (3) (0) (0) (57) (8) (0) (0) (50) (3) (0) (0) bile duct hyperplasia 6 0 0 6 3 0 (16) (3) (0) (0) (7) (13) (0) (0) (17) (8) (0) (0) (5)(3)(0)(0) pancreas <37> <45> <39> atrophy 0 0 0 0 1 0 0 (8)(3)(0)(0) (3)(8)(0)(0) (7)(0)(0)(0) (8)(0)(0)(0) islet cell hyperplasia 0 0 0 0 0 1 0 0 0 0 0 (0)(2)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) 1 : Slight 2 : Moderate 3 : Marked 4 : Severe Grade < a > a: Number of animals examined at the site b b: Number of animals with lesion (c) c:b/a * 100

Test of Chi Square

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

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

ANIMAL

SEX : FEMALE

Organ	Group No. of Grade	Animals on Study 37 1 2 3 4 (%) (%) (%) (%)	25 ppm 45 1 2 3 4 (%) (%) (%) (%)	50 ppm 36 1 2 3 4 (%) (%) (%) (%)	100 ppm 39 1 2 3 4 (%) (%) (%) (%)
{Urinary sys	stem}				
kidney	cyst	<37> 0 0 0 0 0 0 0 0 0 0 0 0 0	<45> 0 1 0 0 (0) (2) (0) (0)	<36> 0 0 0 0 (0) (0) (0) (0)	<39> 1 0 0 0 (3) (0) (0) (0)
	chronic nephropathy	12 1 0 0 (32) (3) (0) (0)	16 2 0 0 (36) (4) (0) (0)	17 0 0 0 (47) (0) (0) (0)	18 3 0 0 (46) (8) (0) (0)
	mineralization:papilla	0 0 0 0 0 (0) (0)	1 0 0 0 (2) (0) (0) (0)	1 0 0 0 (3) (0) (0) (0)	0 0 0 0 0 (0) (0)
	mineralization:pelvis	2 0 0 0 0 (5) (0) (0) (0)	0 0 0 0 0 (0) (0) (0)	1 0 0 0 0 (3) (0) (0)	1 0 0 0 0 (3) (0) (0) (0)
	desquamation:pelvis	0 1 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)
	atypical tubule hyperplasia	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (5) (0) (0) (0)
{Endocrine	system)				
pituitary	angiectasis	<37> 1 0 0 0 (3) (0) (0) (0)	<45> 0 1 0 0 (0) (2) (0) (0)	(0)(0)(0)(0)	<pre></pre>
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3: Mark a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤ 0.01	ed 4: Severe Test of Chi Square			

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj] SACRIFIC

REPORT TYPE : A1

SEX : FEMALE

SACRIFICED ANIMALS (105W)

		Group Name Control No. of Animals on Study 37	25 ppm 45	50 ppm 36	100 ppm 39
rgan	Findings	Grade 1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Endocrine s	system}				
ituitary	cyst	37> 3 0 0 0 (8) (0) (0) (0)	2 0 0 0 (4) (0) (0) (0)	36> 0 0 0 0 (0) (0) (0) (0)	2 0 0 0 (5) (0) (0) (0)
	hyperplasia	7 3 0 0 (19) (8) (0) (0)	6 2 0 0 (13) (4) (0) (0)	4 4 0 0 (11) (11) (0) (0)	8 4 0 0 (21) (10) (0) (0)
hyroid	C-cell hyperplasia	<37> 7 5 0 0 (19) (14) (0) (0)	5 5 0 0 (11) (11) (0) (0)	<36> 6 2 0 0 (17) (6) (0) (0)	5 3 0 0 (13) (8) (0) (0)
Irenal	hyperplasia:cortical cell	<37> 0 · 0 0 0 (0) (0) (0) (0)	<45> 1 0 0 0 (2) (0) (0) (0)	<36> 2 0 0 0 (6) (0) (0) (0)	<39> 0 0 0 0 0 0 0 0 0 0 0
	hyperplasia:medulla	0 0 0 0 0 (0) (0) (0)	0 1 0 0 (0) (2) (0) (0)	0 0 0 0 0 (0) (0)	1 2 0 0 (3) (5) (0) (0)
	focal fatty change:cortex	3 0 0 0 0 (8) (0) (0) (0)	1 1 0 0 (2) (2) (0) (0)	4 1 0 0 (11) (3) (0) (0)	4 0 0 0 (10) (0) (0) (0)
Reproductiv	ve system)				
vary	cyst	<37> 2 0 0 0 (5) (0) (0) (0)	<45> 5 0 0 0 (11) (0) (0) (0)	<36> 2 0 0 0 (6) (0) (0) (0)	39> 1 0 0 0 (3) (0) (0) (0)

<a>⟩

b

(c)

a: Number of animals examined at the site

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

b: Number of animals with lesion

c:b/a*100

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1

SEX

: FEMALE

Ongon		Group Name No. of Animals on Study Grade		25 ppm 45 1 2 3 4 (%) (%) (%) (%)	50 ppm 36 1 2 3 4 (%) (%) (%) (%)	100 ppm 39 1 2 3 4 (%) (%) (%) (%)
Organ	rindings	(%) (%	6) (76) (76)	(%) (%) (%)	(%) (%) (%)	(%) (%) (%)
{Reproductive	e system}					
iterus	fibrosis		<37>) 0 0)) (0) (0)	<45> 0 0 0 0 0 0 0 0 0 0 0 0	<pre></pre>	<pre></pre>
	hyperplasia:epithelium		0 0 0	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0)	2 0 0 0 0 (5) (0) (0)
	hyperplasia:gland	0 (0 0 0	1 0 0 0 0 (2) (0) (0) (0)	1 1 0 0 (3) (3) (0) (0)	1 0 0 0 0 (3) (0) (0) (0)
	cystic endometrial hyperplasia	1 (3) ()	0 0 0	4 0 0 0 0 (9) (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (5) (0) (0) (0)
nammary gl	galactocele		<37> 0 0 0 0) (0) (0)	<45> 0 1 0 0 (0) (2) (0) (0)	<36> 0 0 0 0 0 0 0 0 0 0 0	39> 0 0 0 0 (0) (0) (0) (0)
{Special sens	se organs/appendage}					
эуө	cataract		<37> 0 0 0 0) (0) (0)	3 0 0 0 (7) (0) (0) (0)	<pre></pre>	<pre></pre>
Grade <a>> b (c) Significant (1: Slight 2: Moderate 3 a: Number of animals examined at the s b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤					

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj] SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : FEMALE

PAGE: 18

Organ	Group Na No. of A Grade Findings	me Control nimals on Study 37	25 ppm 45 1 2 3 4 (%) (%) (%) (%)	50 ppm 36 1 2 3 4 (%) (%) (%)	100 ppm 39 1 2 3 4 (%) (%) (%) (%)
{Special sen	se organs/appendage}				
eye	retinal atrophy	<37> 14 5 0 0 (38) (14) (0) (0)	\(\langle 45 \rangle \) 15 2 0 0 (33) (4) (0) (0)	36> 8 4 0 0 (22) (11) (0) (0)	(39) 11 0 0 0 * (28) (0) (0) (0)
{Musculoskel	etal system)				
bone	osteosclerosis	<37> 3 0 0 0 (8) (0) (0) (0)	<45> 4 3 0 0 (9) (7) (0) (0)	3 1 0 0 (8) (3) (0) (0)	<pre></pre>
{Body caviti	es)				
peritoneum	adhesion	<37> 0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	36> 1 0 0 0 (3) (0) (0) (0)	(0) (0) (0) (0) (0) (39)
Grade (a) b (c)	1: Slight 2: Moderate 3: Marked a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤ 0.01				

(HPT150)

BAIS4

APPENDIX M 1

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

STUDY NO. : 0535

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 SEX : MALE

Time-related Weeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm	
		· · · · · · · · · · · · · · · · · · ·					
0 - 52	NO. OF EXAMINED ANIMALS		1	0	1	0	
	NO. OF ANIMALS WITH TUMORS		1	0	1	0	
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	1	0	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0	
	NO. OF BENIGN TUMORS		0	0	0	0	
	NO. OF MALIGNANT TUMORS		1	0	1	0	
	NO. OF TOTAL TUMORS		1	0	1	0	
53 - 78	NO. OF EXAMINED ANIMALS		1	1	2	0	
	NO. OF ANIMALS WITH TUMORS		1	1	2	0	
	NO. OF ANIMALS WITH SINGLE TUMORS		1	1	1	0	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	1	0	
	NO. OF BENIGN TUMORS		0	0	1	0	
	NO. OF MALIGNANT TUMORS		1	1	2	0	
- i	NO. OF TOTAL TUMORS	•	1	1	3	0	
79 - 104	NO. OF EXAMINED ANIMALS		4	5	5	14	
	NO. OF ANIMALS WITH TUMORS		4	5	5	14	
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	1	2	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	5	4	12	
	NO. OF BENIGN TUMORS		4	6	7	18	
	NO. OF MALIGNANT TUMORS		3	4	3	9	
	NO. OF TOTAL TUMORS		7	10	10	27	
105 - 105	NO. OF EXAMINED ANIMALS		44	44	42	36	
	NO. OF ANIMALS WITH TUMORS		44	44	41	36	
	NO. OF ANIMALS WITH SINGLE TUMORS		16	21	17	15	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		28	23	24	21	
	NO. OF BENIGN TUMORS		77	73	67	63	
	NO. OF MALIGNANT TUMORS		9	7	8	4	
	NO. OF TOTAL TUMORS		86	80	75	67	

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

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1 : MALE SEX

PAGE: 2

Time-related Weeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm	
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50	
	NO. OF ANIMALS WITH TUMORS NO. OF ANIMALS WITH SINGLE TUMORS NO. OF ANIMALS WITH MULTIPLE TUMORS		50 19 31	50 22 28	49 20 29	50 17 33	
	NO. OF BENIGN TUMORS NO. OF MALIGNANT TUMORS		81 14	79 12	75 14	81 13	
	NO. OF TOTAL TUMORS		95	91	89	94	

(HPT070)

BAIS4

APPENDIX M 2

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

STUDY NO. : 0535 ANIMAL : RAT I

: RAT F344/DuCr1Cr1j[F344/DuCrj]

NO. OF MALIGNANT TUMORS

NO. OF TOTAL TUMORS

REPORT TYPE : A1 SEX : FEMALE

Group Name 25 ppm 50 ppm 100 ppm Time-related Items_ Control _____Weeks_ NO. OF EXAMINED ANIMALS 0 0 0 - 52 0 0 NO. OF ANIMALS WITH TUMORS NO. OF ANIMALS WITH SINGLE TUMORS 0 NO. OF ANIMALS WITH MULTIPLE TUMORS 0 NO. OF BENIGN TUMORS NO. OF MALIGNANT TUMORS 0 NO. OF TOTAL TUMORS 2 1 0 53 - 78 NO. OF EXAMINED ANIMALS NO. OF ANIMALS WITH TUMORS 2 NO. OF ANIMALS WITH SINGLE TUMORS 1 0 3 NO. OF ANIMALS WITH MULTIPLE TUMORS NO. OF BENIGN TUMORS 0 1 NO. OF MALIGNANT TUMORS 2 NO. OF TOTAL TUMORS 9 NO. OF EXAMINED ANIMALS 12 5 10 79 - 104 NO. OF ANIMALS WITH TUMORS 12 5 NO. OF ANIMALS WITH SINGLE TUMORS 6 8 5 4 NO. OF ANIMALS WITH MULTIPLE TUMORS 8 2 NO. OF BENIGN TUMORS 10 6 NO. OF MALIGNANT TUMORS 3 10 14 NO. OF TOTAL TUMORS 19 37 45 36 39 105 - 105 NO. OF EXAMINED ANIMALS 26 25 26 NO. OF ANIMALS WITH TUMORS 22 NO. OF ANIMALS WITH SINGLE TUMORS 17 12 15 12 13 11 14 NO. OF ANIMALS WITH MULTIPLE TUMORS 34 32 37 NO. OF BENIGN TUMORS 27

5

32

5

39

(HPT070)

7

44

9

41

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

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

REPORT TYPE : A1

SEX : FEMALE

PAGE: 4

Time-relatedWeeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm	
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50	
	NO. OF ANIMALS WITH TUMORS		35	30	38	37	
	NO. OF ANIMALS WITH SINGLE TUMORS		24	15	26	19	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		11	15	12	18	
	NO. OF BENIGN TUMORS		36	38	34	46	
	NO. OF MALIGNANT TUMORS		16	8	20	14	
	NO. OF TOTAL TUMORS		52	46	54	60	
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(HPT070) BAIS4

APPENDIX N 1

HISTOPATHOLOGICAL FINDINGS:

NEOPLASTIC LESIONS : MALE

: 0535

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

(HPT085)

	oup Name of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
system/appandage)					
trichoepithelioma	1	<50> (2%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
keratoacanthoma	1	(2%)	0 (0%)	0 (0%)	2 (4%)
trichoepithelioma:malignant	1	(2%)	1 (2%)	1 (2%)	2 (4%)
fibroma	1	<50> (2%)	<50> 8 (16%)	<50> 2 (4%)	<50> 3 (6%)
leiomyoma	0	(0%)	0 (0%)	0 (0%)	1 (2%)
fibrosarcoma	1	(2%)	0 (0%)	1 (2%)	2 (4%)
ystem}					
bronchiolar—alveolar adenoma	6	<50> (12%)	<50> 3 (6%)	<50> 2 (4%)	<50> 4 (8%)
bronchiolar—alveolar carcinoma	1	(2%)	0 (0%)	0 (0%)	0 (0%)
system)					
xanthoma	0	<50> (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
thymoma:benign	0	<50> (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
mononuclear cell leukemia	5	<50> (10%)	<50> 5 (10%)	<50> 6 (12%)	<50> 4 (8%)
•	system/appandage) trichoepithelioma keratoacanthoma trichoepithelioma:malignant fibroma leiomyoma fibrosarcoma //stem) bronchiolar—alveolar adenoma bronchiolar—alveolar carcinoma system) xanthoma thymoma:benign	FindingsNo. of animals on Study system/appandage) trichoepithelioma	No. of animals on Study 50	No. of animals on Study 50 50 50	No. of animals on Study 50 50 50 50 50 50 50 5

ANIMAL

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS: NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

Group Name Control 25 ppm 50 ppm 100 ppm 50 Findings_ No. of animals on Study 50 50 50 Organ_ {Digestive system} <50> oral cavity <50> <50> <50> squamous cell papilloma 0 (0%) 0 (0%) 2 (4%) 0 (0%) salivary gl <50> <50> <50> <50> adenoma 0 (0%) 1 (2%) 0 (0%) 0 (0%) stomach <50> <50> <50> <50> squamous cell papilloma 1 (2%) 0 (0%) 0 (0%) 0 (0%) squamous cell carcinoma 0 (0%) 0 (0%) 1 (2%) 0 (0%) 0 (0%) osteosarcoma 0 (0%) 1 (2%) 0 (0%) liver <50> <50> <50> <50> hepatocellular adenoma 1 (2%) 0 (0%) 0 (0%) 1 (2%) hepatocellular carcinoma 1 (2%) 1 (2%) 0 (0%) 0 (0%) ⟨50⟩ <50> <50> <50> pancreas islet cell adenoma 3 (6%) 3 (6%) 2 (4%) 0 (0%) {Urinary system} kidney <50> <50> <50> <50> 0 (0%) 0 (0%) 0 (0%) renal cell adenoma 1 (2%) 0 (0%) 1 (2%) 0 (0%) hemangiosarcoma 0 (0%) {Endocrine system} <50> pituitary <50> <50> <50> adenoma 6 (12%) 4 (8%) 7 (14%) 8 (16%) < a > a : Number of animals examined at the site b (c) b: Number of animals with neoplasm c:b/a * 100

: 0535

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1
SEX : MAL

: MALE

Organ	Findings	Group Name No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Endocrine sy	stem)					
thyroid	C-cell adenoma	3	<50> 3 (6%)	<50> 6 (12%)	<50> 8 (16%)	<50> 6 (12%)
	follicular adenoma	(0%)	0 (0%)	1 (2%)	0 (0%)
	C-cell carcinoma	1	1 (2%)	1 (2%)	1 (2%)	0 (0%)
adrenal	pheochromocytoma	2	<50> 2 (4%)	<50> 2 (4%)	<50> 3 (6%)	<50> 3 (6%)
	cortical adenoma	1	1 (2%)	0 (0%)	0 (0%)	0 (0%)
	pheochromocytoma:malignant		0%)	1 (2%)	1 (2%)	1 (2%)
{Reproductive	system)					
testis	interstitial cell tumor	47	<50> 7 (94%)	<50> 49 (98%)	<50> 44 (88%)	<50> 48 (96%)
mammary gl	adenoma	(<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	fibroadenoma	:	3 (6%)	0 (0%)	0 (0%)	2 (4%)
prep/cli gl	adenoma	;	<50> 3 (6%)	<50> 1 (2%)	<50> 1 (2%)	<50> 2 (4%)
{Nervous syst	cem}					
brain	malignant reticulosis	(<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
(a) b (c)	a: Number of animals examined at the site b: Number of animals with neoplasm c:b/a*1	100				
(HPT085)						RAT

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

(HPT085)

SEX : MALE

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Organ	Findings	Group Name No. of animals on Study		Control 50		25 ppm 50		50 ppm 50		100 ppm 50
{Nervous syste	em)									
brain	glioma			50> 2%)	0	<50> (0%)	0	<50> (0%)	0	<50> (0%)
periph nerv	schwannoma:malignant			50> 2%)	0	<50> (0%)	0	<50> (0%)	0	<50> (0%)
{Special sense	e organs/appendage)									
Zymbal gl	squamous cell carcinoma			50> 0%)	0	<50> (0%)	0	<50> (0%)	2	<50> (4%)
{Musculoskele	tal system)									
bone	osteoma			50> (4%)	0	<50> (0%)	0	<50> (0%)	0	<50> (0%)
	osteosarcoma		1 (2%)	0	(0%)	0	(0%)	0	(0%)
vertebra	chordoma			(50> (0%)	. 0	<50> (0%)	1	<50> (2%)	0	<50> (0%)
{Body cavities	s)									
peritoneum	mesothelioma			(50> (2%)	2	<50> (4%)	1	<50> (2%)	2	<50> (4%)
(a)	a: Number of animals examined at the site b: Number of animals with neoplasm c: b,	/ a * 100								

APPENDIX N 2

HISTOPATHOLOGICAL FINDINGS:

NEOPLASTIC LESIONS : FEMALE

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

ANIMAL

SEX : FEMALE

Group Name 25 ppm Control 50 ppm 100 ppm Organ_ Findings_ No. of animals on Study 50 50 50 50 {Integumentary system/appandage} subcutis <50> <50> <50> <50> fibroma 1 (2%) 1 (2%) 0 (0%) 2 (4%) {Respiratory system} lung <50> <50> ⟨50⟩ <50> bronchiolar-alveolar adenoma 0 (0%) 2 (4%) 0 (0%) 1 (2%) bronchiolar-alveolar carcinoma 0 (0%) 1 (2%) 0 (0%) 1 (2%) {Hematopoietic system} spleen <50> <50> <50> <50> mononuclear cell leukemia 8 (16%) 4 (8%) 9 (18%) 9 (18%) {Digestive system} oral cavity <50> <50> <50> <50> squamous cell papilloma 1 (2%) 0 (0%) 0 (0%) 0 (0%) liver <50> <50> <50> <50> hepatocellular adenoma 2 (4%) 1 (2%) 0 (0%) 1 (2%) pancreas <50> <50> <50> <50> islet cell adenoma 2 (4%) 1 (2%) 0 (0%) 1 (2%) {Urinary system} kidney <50> <50> <50> <50> mesenchymoma:malignant 0 (0%) 0 (0%) 0 (0%) 1 (2%) urin bladd <50> <50> <50> <50> transitional cell papilloma 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

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

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

REPORT TYPE : A1 SEX : FEMALE

Organ	Findings	Group Name No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Endocrine sy	rstem}					
pituitary	adenoma	1	<50> 1 (22%)	<50> 12 (24%)	<50> 10 (20%)	<50> 8 (16%)
	adenocarcinoma	:	2 (4%)	0 (0%)	1 (2%)	1 (2%)
thyroid	C-cell adenoma	;	<50> 2 (4%)	<50> 2 (4%)	<50> 1 (2%)	<50> 4 (8%)
	follicular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	C-cell carcinoma	(0 (0%)	0 (0%)	2 (4%)	0 (0%)
adrenal	pheochromocytoma	ţ	<50> 0 (0%)	<50> 1 (2%)	<50> 2 (4%)	<50> 2 (4%)
	cortical adenoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
	pheochromocytoma: malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
Reproductive	system)					
ovary	hemangioma	,	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	sertoli cell tumor	(0 (0%)	0 (0%)	0 (0%)	1 (2%)
	adenocarcinoma	(0 (0%)	1 (2%)	0 (0%)	0 (0%)
uterus	endometrial stromal polyp	1:	<50> 1 (22%)	<50> 10 (20%)	<50> 12 (24%)	<50> 14 (28%)
<a>>	a: Number of animals examined at the site b: Number of animals with neoplasm c: b/a * 1	00				
(HPT085)						

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

(HPT085)

SEX : FEMALE

Organ	Findings	Group Name No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
Reproductive	system)					
terus	adenocarcinoma	1	<50> (2%)	<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)
	endometrial stromal sarcoma	4	(8%)	0 (0%)	2 (4%)	2 (4%)
mmary gl	fibroadenoma	4	<50> (8%)	<50> 8 (16%)	<50> 6 (12%)	<50> 6 (12%)
	adenocarcinoma	. 0	(0%)	1 (2%)	2 (4%)	0 (0%)
rep/cli gl	adenoma	1	<50> (2%)	<50> 0 (0%)	<50> 1 (2%)	<50> 2 (4%)
Nervous syste	om)					
cain	glioma	0	<50> (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
pecial sense	e organs/appendage)					
mbal gl	Zmbal gland tumor:benign	0	<50> (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
Musculoskelet	al system)					
one	osteosarcoma	0	<50> (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
Body cavities	5}					
eritoneum	hemangioma	0	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)

APPENDIX O 1

NEOPLASTIC LESIONS-INCIDENCE

AND STATISTICAL ANALYSIS: MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

SEX : MALE

Group Name Control 25 ppm 50 ppm 100 ppm SITE : subcutis TUMOR : fibroma Tumor rate Overall rates(a) 1/50(2.0) 8/50 (16.0) 2/50(4.0) 3/50(6.0) Adjusted rates(b) 2, 27 15.91 5.56 4.65 Terminal rates(c) 1/44(2.3) 7/44(15.9) 1/42(2.4) 2/36(5.6) Statistical analysis Peto test Standard method(d) P = 0.2228Prevalence method(d) P = 0.5369Combined analysis(d) P = 0.4100Cochran-Armitage test(e) P = 0.9254Fisher Exact test(e) P = 0.0154*P = 0.5000P = 0.3087SITE : subcutis TUMOR : fibroma, fibrosarcoma Tumor rate Overall rates(a) 2/50(4.0) 8/50(16.0) 3/50(6.0) 5/50(10.0) 2.27 Adjusted rates(b) 15.91 6.98 8.33 Terminal rates(c) 1/44(2.3) 7/44(15.9) 2/42(4.8) 3/36(8.3) Statistical analysis Peto test Standard method(d) P = 0.2293Prevalence method(d) P = 0.3321Combined analysis(d) P = 0.2295Cochran-Armitage test(e) P = 0.6762Fisher Exact test(e) P = 0.0458*P = 0.5000P = 0.2180SITE : lung TUMOR : bronchiolar-alveolar adenoma Tumor rate Overall rates(a) 6/50 (12.0) 3/50(6.0) 2/50(4.0) 4/50(8.0) Adjusted rates(b) 13.64 6.82 4.76 8.89 Terminal rates(c) 6/44(13.6) 3/44(6.8) 2/42(4.8) 3/36(8.3) Statistical analysis Peto test Standard method(d) P = ----Prevalence method(d) P = 0.6691Combined analysis(d) P = -----Cochran-Armitage test(e) P = 0.5552Fisher Exact test(e) P = 0.2435P = 0.1343P = 0.3703

(HPT360A)

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE:

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BAIS4

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

SEX : MALE

(HPT360A)

Group Name Control 25 ppm 50 ppm 100 ppm SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma Tumor rate Overall rates(a) 7/50(14.0) 3/50(6.0) 2/50(4.0) 4/50(8.0) Adjusted rates(b) 15.91 6.82 4.76 8.89 Terminal rates(c) 7/44(15.9) 3/44(6.8) 2/42(4.8) 3/36(8.3) Statistical analysis Peto test Standard method(d) P = -----Prevalence method(d) P = 0.7652Combined analysis(d) P = -----Cochran-Armitage test(e) P = 0.3782Fisher Exact test(e) P = 0.1589P = 0.0798P = 0.2623SITE : spleen TUMOR : mononuclear cell leukemia Tumor rate Overall rates(a) 5/50(10.0) 5/50(10.0) 6/50(12.0) 4/50(8.0) Adjusted rates(b) 6.82 4.55 7.14 2.78 Terminal rates(c) 3/44(6.8) 2/44(4.5) 3/42(7.1) 1/36(2.8) Statistical analysis Peto test Standard method(d) P = 0.3216Prevalence method(d) P = 0.7340Combined analysis(d) P = 0.5261Cochran-Armitage test(e) P = 0.7499Fisher Exact test(e) P = 0.6297P = 0.5000P = 0.5000SITE : pancreas TUMOR : islet cell adenoma Tumor rate Overall rates(a) 3/50(6.0) 3/50(6.0) 2/50(4.0) 0/50(0.0) Adjusted rates(b) 6.82 6.82 4.76 0.0 Terminal rates(c) 3/44(6.8) 3/44(6.8) 2/42(4.8) 0/36(0.0) Statistical analysis Peto test Standard method(d) P = ----Prevalence method(d) P = 0.9434Combined analysis(d) Cochran-Armitage test(e) P = 0.0877Fisher Exact test(e) P = 0.6611P = 0.5000P = 0.1212

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

SEX : MALE

PAGE: 3

Group Name	Control	25 ppm	50 ppm	100 ppm	
	SITE : pituitary gland				
Tumor rate	TUMOR : adenoma				
Overall rates(a)	6/50(12.0)	4/50(8.0)	7/50 (14. 0)	8/50 (16. 0)	
Adjusted rates(b)	13. 64	9.09	13. 04	16. 67	
Terminal rates(c)	6/44(13.6)	4/44(9.1)	5/42(11.9)	6/36(16.7)	
tatistical analysis			·, ·= (==· ·,	, , , , , , , , , , , , , , , , , , , ,	
Peto test					
Standard method(d)	P = 0.0381*				
Prevalence method(d)	P = 0.3060				
Combined analysis(d)	P = 0.1240				
Cochran-Armitage test(e)	P = 0.3663				
Fisher Exact test(e)		P = 0.3703	P = 0.5000	P = 0.3871	
	SITE : thyroid				
	TUMOR : C-cell adenoma				
fumor rate					
Overall rates(a)	3/50(6.0)	6/50(12.0)	8/50(16.0)	6/50(12.0)	
Adjusted rates(b)	6. 82	13.64	19. 05	16. 67	
Terminal rates(c)	3/44(6.8)	6/44(13.6)	8/42(19.0)	6/36(16.7)	
Statistical analysis					
Peto test Standard method(d)	P =				
Prevalence method(d)	P = 0.0999				
Combined analysis(d)	P =				
Cochran-Armitage test(e)	P = 0.3889				
Fisher Exact test(e)	1 - 0.0000	P = 0.2435	P = 0.0999	P = 0.2435	
110101 11400 1000(0)		1 - 0. 2100	1 - 0.0333	r - 0. 2430	
	SITE : thyroid				
	TUMOR : C-cell adenoma, C-cell c	arcinoma			
Cumor rate					
Overall rates(a)	4/50(8.0)	7/50(14.0)	9/50(18.0)	6/50(12.0)	
Adjusted rates(b)	9.09	15. 91	19. 05	16. 67	
Terminal rates(c)	4/44(9.1)	7/44(15.9)	8/42(19.0)	6/36 (16. 7)	
Statistical analysis					
Peto test					
Standard method(d)	P = 0.4016				
Prevalence method(d)	P = 0.1821				
Combined analysis(d)	P = 0.1784				
Cochran-Armitage test(e)	P = 0.6188				
Fisher Exact test(e)		P = 0.2623	P = 0.1168	P = 0.3703	

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

STUDY No. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
SEX : MALE

PAGE: 4

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : adrenal gland			
	TUMOR : pheochromocytoma			
umor rate	0/50/ 4.0)	0 (70 ()	2 (72 (- (max
Overall rates(a) Adjusted rates(b)	2/50(4.0)	2/50 (4.0)	3/50(6.0)	3/50 (6. 0)
Terminal rates(c)	4. 55 2/44(4. 5)	4.55 2/44(4.5)	6. 67	6. 38
tatistical analysis	2/11(4.5)	2/44(4.5)	2/42(4.8)	2/36(5.6)
Peto test				
Standard method(d)	P =			
Prevalence method(d)	P = 0.2914			
Combined analysis(d)	P =			
Cochran-Armitage test(e)	P = 0.5834			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.5000
Oumor rate Overall rates(a) Adjusted rates(b) Terminal rates(c) tatistical analysis Peto test Standard method(d) Prevalence method(d) Combined analysis(d) Cochran-Armitage test(e) Fisher Exact test(e)	SITE : adrenal gland TUMOR : pheochromocytoma, p	romocytoma:malignant 3/50(6.0)	4/50(8.0) 8.89 3/42(7.1) P = 0.3389	4/50 (8.0) 6.38 2/36 (5.6) P = 0.3389
	SITE : testis TUMOR : interstitial cell tumor			
'umor rate Overall rates(a)	47/50 (94.0)	49/50 (98. 0)	44/50(88.0)	48/50 (96. 0)
Adjusted rates(b)	100.00	100.00	44/50 (88. 0) 97. 73	48/50(95.0)
Terminal rates(c)	44/44(100.0)	44/44(100.0)	41/42(97.6)	36/36(100.0)
tatistical analysis	********************************	11/ 11/1000 0/	11/14(01.0)	00/00(100.0/
Peto test				
Standard method(d)	P =			
Prevalence method(d)	P = 0.3712			
Combined analysis(d)	P =			
Cochran-Armitage test(e)	P = 1.0000			
Fisher Exact test(e)		P = 0.3087	P = 0.2435	P = 0.5000

(HPT360A)

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

SEX : MALE

PAGE: 5

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : mammary gland			
Cumor rate	TUMOR : fibroadenoma			
Overall rates(a)	3/50(6.0)	0/50(0.0)	0/50/ 0.0)	0/50/ 4.0)
Adjusted rates(b)	6. 82	0.0	0/50(0.0) 0.0	2/50(4.0)
Terminal rates(c)	3/44(6.8)	0.0	0.0	2.78
Statistical analysis	3/44(0.0)	0,44(0.0)	0/42(0.0)	1/36(2.8)
Peto test				
Standard method(d)	P = 0.1093			•
Prevalence method(d)	P = 0.8044			
Combined analysis(d)	P = 0.5183			
Cochran-Armitage test(e)	P = 0.8183			
Fisher Exact test(e)	1 0.0100	P = 0.1212	P = 0.1212	P = 0.5000
	SITE : mammary gland TUMOR : adenoma, fibroadenoma			
Cumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	6. 82	2. 27	0.0	2. 78
Terminal rates(c)	3/44(6.8)	1/44(2.3)	0/42(0.0)	1/36(_ 2.8)
Statistical analysis				
Peto test	D 4 4404			
	P = 0.1093			
Standard method(d)	5 0 0070			
Prevalence method(d)	P = 0.8376			
Prevalence method(d) Combined analysis(d)	P = 0.5881			
Prevalence method(d)		P = 0.3087	P = 0.1212	P = 0.5000

(HPT360A)

BAIS4

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

SEX

: MALE

Group Name	Control	25 ppm	50 ppm	100 ppm	
	SITE : preputial/clitoral gl	and			
Tumor rate					
Overall rates(a)	3/50(6.0)	1/50(2.0)	1/50(2.0)	2/50(4.0)	
Adjusted rates(b)	6.82	2. 27	2. 38	5. 56	
Terminal rates(c)	3/44(6.8)	1/44(2.3)	1/42(2.4)	2/36 (5. 6)	
tatistical analysis				_,,	
Peto test					
Standard method(d)	P =				
Prevalence method(d)	P = 0.5349				
Combined analysis(d)	P =				
Cochran-Armitage test(e)	P = 0.7450				
Fisher Exact test(e)		P = 0.3087	P = 0.3087	P = 0.5000	
IPT360A)					

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PAGE:

- (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 out comes can not estimated or this P-value is beyond the estimated P-value.
- ----: There is no data which should be statistical analysis.

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

N.C.: Statistical value cannot be calculated and was not significant.

APPENDIX O 2

NEOPLASTIC LESIONS-INCIDENCE

AND STATISTICAL ANALYSIS: FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

SEX : FEMALE

PAGE: Group Name Control 25 ppm 50 ppm 100 ppm SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma Tumor rate Overall rates(a) 0/50(0.0) 3/50(6.0) 0/50(0.0) 2/50(4.0) Adjusted rates(b) 0.0 6.67 0.0 5.13 Terminal rates(c) 0/37(0.0) 3/45(6.7) 0/36(0.0) 2/39 (5.1) Statistical analysis Peto test Standard method(d) Prevalence method(d) P = 0.2396Combined analysis(d) P = ----Cochran-Armitage test(e) P = 0.4908Fisher Exact test(e) P = 0.1212P = N.C.P = 0.2475SITE : spleen TUMOR : mononuclear cell leukemia Tumor rate Overall rates(a) 8/50(16.0) 4/50(8.0) 9/50(18.0) 9/50 (18.0) Adjusted rates(b) 8.11 4.44 13.89 7.69 Terminal rates(c) 3/37(8.1) 2/45(4.4) 5/36(13.9) 3/39(7.7) Statistical analysis Peto test Standard method(d) P = 0.2311Prevalence method(d) P = 0.3862Combined analysis(d) P = 0.2293Cochran-Armitage test(e) P = 0.4615Fisher Exact test(e) P = 0.1783P = 0.5000P = 0.5000SITE : pituitary gland TUMOR : adenoma Tumor rate Overall rates(a) 11/50(22.0) 12/50(24.0) 10/50 (20.0) 8/50(16.0) Adjusted rates(b) 24.32 23.40 27.78 17.95 Terminal rates(c) 9/37(24.3) 10/45(22.2) 10/36(27.8) 7/39 (17.9) Statistical analysis Peto test Standard method(d) P = 0.8736Prevalence method(d) P = 0.7252Combined analysis(d) P = 0.8079Cochran-Armitage test(e) P = 0.3587Fisher Exact test(e) P = 0.5000P = 0.5000P = 0.3055

(HPT360A)

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

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BAIS4

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

SEX : FEMALE

(HPT360A)

Group Name Control 25 ppm 50 ppm 100 ppm SITE : pituitary gland TUMOR : adenoma, adenocarcinoma Tumor rate Overall rates (a) 13/50 (26.0) 12/50 (24.0) 11/50(22.0) 9/50(18.0) Adjusted rates(b) 27.03 23, 40 27.78 20.51 Terminal rates(c) 10/37(27.0) 10/45(22.2) 10/36(27.8) 8/39 (20.5) Statistical analysis Peto test Standard method(d) P = 0.9090Prevalence method(d) P = 0.7086Combined analysis(d) P = 0.8315Cochran-Armitage test(e) P = 0.3164Fisher Exact test(e) P = 0.5000P = 0.4076P = 0.2348SITE : thyroid TUMOR : C-cell adenoma Tumor rate Overall rates(a) 2/50(4.0) 2/50(4.0) 1/50(2.0) 4/50(8.0) Adjusted rates(b) 4.88 4.44 2.78 10.26 Terminal rates(c) 1/37(2.7) 2/45(4.4) 1/36(2.8) 4/39 (10.3) Statistical analysis Peto test Standard method(d) P = -----Prevalence method(d) P = 0.1524Combined analysis(d) P = ----Cochran-Armitage test(e) P = 0.3270Fisher Exact test(e) P = 0.6913P = 0.5000P = 0.3389SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma Tumor rate Overall rates(a) 2/50(4.0) 2/50(4.0) 3/50(6.0) 4/50(8.0) Adjusted rates(b) 4.88 4.44 8.33 10.26 Terminal rates(c) 1/37(2.7) 2/45(4.4) 3/36(8.3) 4/39 (10.3) Statistical analysis Peto test Standard method(d) Prevalence method(d) P = 0.1464Combined analysis(d) P = ----Cochran-Armitage test(e) P = 0.3192Fisher Exact test(e) P = 0.6913P = 0.5000P = 0.3389

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCri]

SEX : FEMALE

Group Name Control 25 ppm 50 ppm 100 ppm SITE : uterus TUMOR : endometrial stromal polyp Tumor rate Overall rates(a) 11/50(22.0) 10/50(20.0) 12/50(24.0) 14/50(28.0) Adjusted rates(b) 23.68 22, 22 30.77 30.77 Terminal rates(c) 8/37(21.6) 10/45(22.2) 11/36(30,6) 12/39 (30.8) Statistical analysis Peto test Standard method(d) P = 0.9335 ? Prevalence method(d) P = 0.1322Combined analysis(d) P = 0.1818Cochran-Armitage test(e) P = 0.3822Fisher Exact test(e) P = 0.5000P = 0.5000P = 0.3224SITE : uterus TUMOR : endometrial stromal sarcoma Tumor rate Overall rates(a) 4/50(8.0) 0/50(0.0) 2/50(4.0) 2/50(4.0) Adjusted rates(b) 0.0 0.0 2.78 5.13 Terminal rates(c) 0/37(0.0) 0/45(0.0)1/36(2.8) 2/39(5.1) Statistical analysis Peto test Standard method(d) P = 0.9876Prevalence method(d) P = 0.0367*Combined analysis(d) P = 0.6632Cochran-Armitage test(e) P = 0.6256Fisher Exact test(e) P = 0.0587P = 0.3389P = 0.3389SITE : mammary gland TUMOR : fibroadenoma Tumor rate Overall rates(a) 4/50(8.0) 8/50(16.0) 6/50(12.0) 6/50 (12.0) Adjusted rates(b) 9.09 15.22 16.67 15.38 Terminal rates(c) 3/37(8.1) 6/45(13.3) 6/36(16.7) 6/39 (15.4) Statistical analysis Peto test Standard method(d) P = 0.5714Prevalence method(d) P = 0.3345Combined analysis(d) P = 0.3764Cochran-Armitage test(e) P = 0.7686Fisher Exact test(e) P = 0.1783P = 0.3703P = 0.3703

(HPT360A)

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ANIMAL

SEX

: RAT F344/DuCrlCrlj[F344/DuCrj]

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE: 10

Group Name	Control	25 ppm	50 ppm	100 ppm	
Turan	SITE : mammary gland TUMOR : fibroadenoma, adenocan	cinoma			•••
Tumor rate Overall rates(a) Adjusted rates(b) Terminal rates(c) Statistical analysis	4/50(8.0) 9.09 3/37(8.1)	9/50 (18. 0) 17. 39 7/45 (15. 6)	8/50(16.0) 16.67 6/36(16.7)	6/50 (12. 0) 15. 38 6/39 (15. 4)	
Peto test Standard method(d) Prevalence method(d) Combined analysis(d) Cochran-Armitage test(e)	P = 0.5056 P = 0.3769 P = 0.3941 P = 0.8066				
Fisher Exact test(e)	r = 0.0000	P = 0.1168	P = 0.1783	P = 0.3703	
HPT360A)					BAIS

(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 out comes can not estimated or this P-value is beyond the estimated P-value.

----: There is no data which should be statistical analysis.

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

N.C.: Statistical value cannot be calculated and was not significant.

APPENDIX P 1

HISTOPATHOLOGICAL FINDINGS:

METASTASIS OF TUMOR:

MALE

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : MALE

Organ		Group Name No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Respiratory	system)					
nasal cavit	leukemic cell infiltration		<50> 0	<50> 0	<50> 1	<50> 0
lung	leukemic cell infiltration		<50> 3	<50> 2	<50> 4	<50> 3
	metastasis:subcutis tumor		0	0	0	1
	metastasis:skin/appendage tumor		1	0	0	0
{Hematopoieti	c system}					
bone marrow	leukemic cell infiltration		<50> 1	<50> 1	<50> 1	<50> 1
lymph node	leukemic cell infiltration		<50> 1	<50> 1	<50> 2	<50> 1
{Circulatory	system}					
heart	leukemic cell infiltration		<50> 0	<50> 0	<50> 0	<50> 1
	metastasis:skin/appendage tumor		1	0	0	0
{Digestive sy	stem}					
liver	leukemic cell infiltration		<50> 2	<50> 2	<50> 6	<50> 2
pancreas	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
<pre></pre>	a: Number of animals examined at the si b: Number of animals with lesion	te				<u> </u>

SEX

: RAT F344/DuCr1Cr1j[F344/DuCrj]

: MALE

ANIMAL REPORT TYPE : A1 HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

PAGE: 2 Group Name Control 25 ppm 50 ppm 100 ppm No. of Animals on Study 50 50 Organ_ Findings_ {Urinary system} kidney <50> ⟨50⟩ <50> <50> leukemic cell infiltration 0 0 urin bladd <50> <50> **<49>** <49> leukemic cell infiltration 0 1 0 (Endocrine system) adrenal <50> <50> <50> <50> leukemic cell infiltration 0 0 {Nervous system} brain <50> <50> <50> ⟨50⟩ leukemic cell infiltration 0 metastasis:bone tumor metastasis:peripheral nerve tumor 1 0 0 spinal cord <50> <50> <50> ⟨50⟩ leukemic cell infiltration 0 1 1 0 periph nerv <50> <50> <50> <50> metastasis:bone tumor 0 {Body cavities} adipose ⟨50⟩ <50> <50> <50> metastasis:kidney tumor 0 0 < a > a: Number of animals examined at the site b b: Number of animals with lesion

(JPT150)

BAIS4

APPENDIX P 2

HISTOPATHOLOGICAL FINDINGS:

METASTASIS OF TUMOR:

FEMALE

STUDY NO. : 0535 ANIMAL : RAT F

: RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

(JPT150)

SEX : FEMALE

Organ	Findings	Group Name No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
Integumentary	system/appandage}					
subcutis	motantosio'utamus tuman		<50>	<50> 0	<50> 1	<50≻ 0
	metastasis:uterus tumor		1	U	1	V
Respiratory s	system}					
ung	leukemic cell infiltration		<50> 5	<50> 2	<50> 5	<50> 5
	metastasis:uterus tumor		1	0	2	0
	metastasis:bone tumor		0	0	1	0
Hematopoietic	system}					
oone marrow	leukemic cell infiltration		<50> 4	<50> 2	<50> 1	<50> 2
ymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	2	0	2
	metastasis:uterus tumor		0	0	1	0
	metastasis:thyroid tumor		0	0	1	. 0
Digestive sys	stem)					
stomach			<50>	< 50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
large intes	metastasis:uterus tumor		<50> 1	<50> 0	<50> 1	<50> 0
liver			<50>	<50>	< 50>	<50>
J _	leukemic cell infiltration		7	2	6	9
< a >	a: Number of animals examined at tb: Number of animals with lesion	the site				

ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 : FEMALE SEX

pancreas 10 me {Urinary system} kidney 10	netastasis:uterus tumor netastasis:ovary tumor leukemic cell infiltration netastasis:uterus tumor	<50> 1 0 <50> 3	<50> 0 1	<50> 2 0	<50> 0
liver me pancreas 1 (Urinary system) kidney 1	metastasis:uterus tumor metastasis:ovary tumor Leukemic cell infiltration	1 0 <50>	0	2	0
me pancreas 1 me {Urinary system} kidney	netastasis:ovary tumor	1 0 <50>	0	2	0
pancreas 1d me {Urinary system} kidney 1d	leukemic cell infiltration	<50>		0	n
le m (Urinary system) cidney					V
(Urinary system) kidney	metastasis:uterus tumor	•	<50> 0	<50> 1	<50> 0
cidney 1		1	0	1	0
10					
me	leukemic cell infiltration	<50> 2	<50> 1	<50> 0	<50> 1
	metastasis:uterus tumor	0	0	1	0
rin bladd 1	Leukemic cell infiltration	<50> 0	<50> 0	<50> 1	<50> 0
m	metastasis:uterus tumor	1	0	1	0
{Endocrine system	n)				
pituitary 1	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 1
adrenal 1	leukemic cell infiltration	<50> 0	<50> 1	<50> 1	<50> 0
{Reproductive sys	stem)				
ovary m	metastasis:uterus tumor	<50> 1	<50> 0	<50> 0	<50> 0
	a: Number of animals examined at the site b: Number of animals with lesion				

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

: FEMALE SEX

PAGE: 5

Organ		Group Name No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
rgan	rindings					
Reproductive	aveter)					
Webi oddc tive	system;					
uterus	1 1 - 11 - 011		<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	1
{Nervous syste	em}					
brain			<50>	<50>	< 50>	<50>
	leukemic cell infiltration		1	0	2	1
	metastasis:pituitary tumor		2	0	1	1
spinal cord			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	1
{Body cavities	s)					
peritoneum			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	0	1
	metastasis:ovary tumor		0	1	0	0
(a)	a : Number of animals examined at the si	te				
ь	b : Number of animals with lesion					
(JPT150)						

APPENDIX Q

METHODS, UNITS AND DECIMAL PLACE FOR
HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR
INHALATION STUDY OF PROPIONONITRILE

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

Item	Method	Unit	Decimal
			place
Hematology			
Red blood cell (RBC)	Light scattering method	$\times 10^6/\mu$ L	2
Hemoglobin(Hgb)	Cyanmethemoglobin method 1	g/dL	1
Hematocrit(Hct)	Calculated as RBC×MCV/10 10	%	1
Mean corpuscular volume(MCV)	Light scattering method	fL	1
Mean corpuscular hemoglobin(MCH)	Calculated as Hgb/RBC×10	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct×100 ¹⁰	g/dL	1
Platelet	Light scattering method	×10³/μL	0
Reticulocyte	Light scattering method	%	1
White blood cell(WBC)	Light scattering method	×10³/μL	2
Differential WBC	Pattern recognition method ²⁾	%	0
Bhiolomaa WBo	(Wright staining)		
Biochemistry			
Total protein(TP)	Biuret method 3)	g/dL	1
Albumin (Alb)	BCG method 3)	g/dL	1
A/G ratio	Calculated as Alb/(TP-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 ⁸⁾	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) $\,$

3) Automatic analyzer (Hitachi7080: Hitachi, Ltd.)

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