

1,2-ジクロロプロパンのラットを用いた
吸入によるがん原性試験報告書

試験番号：0457

APPENDICES

APPENDICES

APPENDIX A 1	IDENTITY OF 1,2-DICHLOROPROPANE IN THE 2-YEAR INHALATION STUDY
APPENDIX A 2	STABILITY OF 1,2-DICHLOROPROPANE IN THE 2-YEAR INHALATION STUDY
APPENDIX B	ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF 1,2-DICHLOROPROPANE
APPENDIX C 1	CLINICAL OBSERVATION: MALE
APPENDIX C 2	CLINICAL OBSERVATION: FEMALE
APPENDIX D 1	BODY WEIGHT CHANGES: MALE
APPENDIX D 2	BODY WEIGHT CHANGES: FEMALE
APPENDIX E 1	FOOD CONSUMPTION CHANGES: MALE
APPENDIX E 2	FOOD CONSUMPTION CHANGES: FEMALE
APPENDIX F 1	HEMATOLOGY: MALE
APPENDIX F 2	HEMATOLOGY: FEMALE
APPENDIX G 1	BIOCHEMISTRY: MALE
APPENDIX G 2	BIOCHEMISTRY: FEMALE
APPENDIX H 1	URINALYSIS: MALE
APPENDIX H 2	URINALYSIS: FEMALE
APPENDIX I 1	GROSS FINDINGS: MALE: ALL ANIMALS
APPENDIX I 2	GROSS FINDINGS: MALE: DEAD AND MORIBUND ANIMALS
APPENDIX I 3	GROSS FINDINGS: MALE: SACRIFICED ANIMALS

APPENDICES (CONTINUED)

APPENDIX I 4	GROSS FINDINGS: FEMALE: ALL ANIMALS
APPENDIX I 5	GROSS FINDINGS: FEMALE: DEAD AND MORIBUND ANIMALS
APPENDIX I 6	GROSS FINDINGS: FEMALE: SACRIFICED ANIMALS
APPENDIX J 1	ORGAN WEIGHT, ABSOLUTE: MALE
APPENDIX J 2	ORGAN WEIGHT, ABSOLUTE: FEMALE
APPENDIX K 1	ORGAN WEIGHT, RELATIVE: MALE
APPENDIX K 2	ORGAN WEIGHT, RELATIVE: FEMALE
APPENDIX L 1	HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: MALE: ALL ANIMALS
APPENDIX L 2	HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: MALE: DEAD AND MORIBUND ANIMALS
APPENDIX L 3	HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: MALE: SACRIFICED ANIMALS
APPENDIX L 4	HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: FEMALE: ALL ANIMALS
APPENDIX L 5	HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: FEMALE: DEAD AND MORIBUND ANIMALS
APPENDIX L 6	HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: FEMALE: SACRIFICED ANIMALS
APPENDIX M 1	NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED: MALE
APPENDIX M 2	NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED: FEMALE
APPENDIX N 1	HISTOPATHOLOGICAL FINDINGS: NEOPLASTIC LESIONS: MALE
APPENDIX N 2	HISTOPATHOLOGICAL FINDINGS: NEOPLASTIC LESIONS: FEMALE

APPENDICES (CONTINUED)

APPENDIX O 1	NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS: MALE
APPENDIX O 2	NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS: FEMALE
APPENDIX P 1	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: MALE: ALL ANIMALS
APPENDIX P 2	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: MALE: DEAD AND MORIBUND ANIMALS
APPENDIX P 3	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: MALE: SACRIFICED ANIMALS
APPENDIX P 4	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: FEMALE: ALL ANIMALS
APPENDIX P 5	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: FEMALE: DEAD AND MORIBUND ANIMALS
APPENDIX P 6	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: FEMALE: SACRIFICED ANIMALS
APPENDIX Q	METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF 1,2-DICHLOROPROPANE

APPENDIX A 1

IDENTITY OF 1,2-DICHLOROPROPANE IN THE 2-YEAR INHALATION STUDY

IDENTITY OF 1,2-DICHLOROPROPANE IN THE 2-YEAR INHALATION STUDY

Test Substance : 1,2-Dichloropropane (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : LDL5937

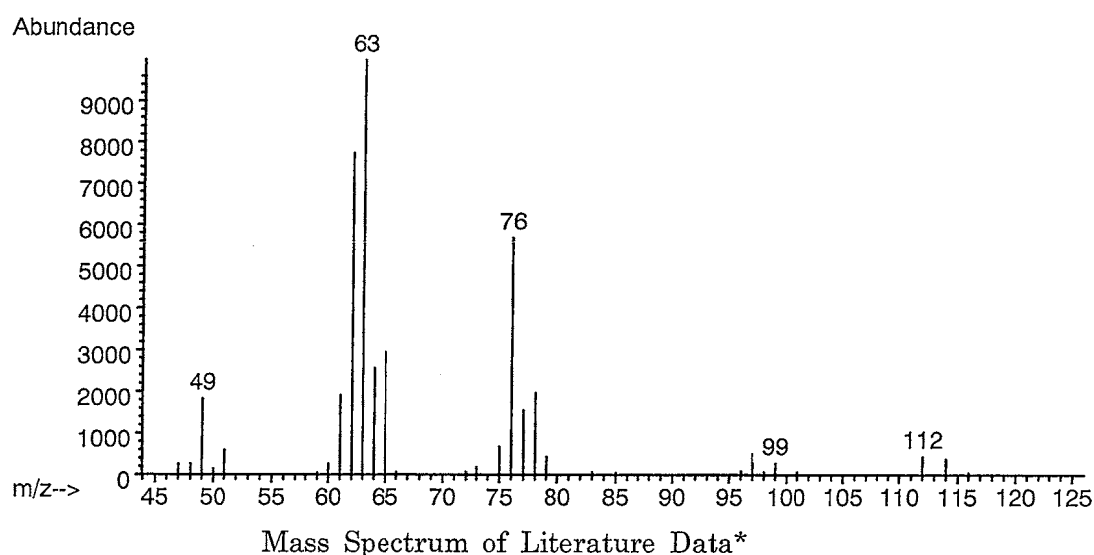
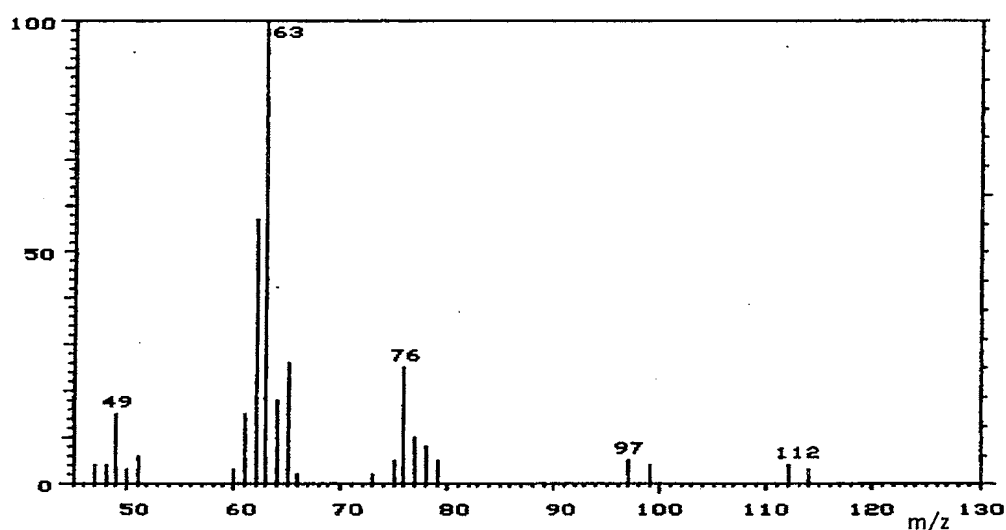
1. Spectral Data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



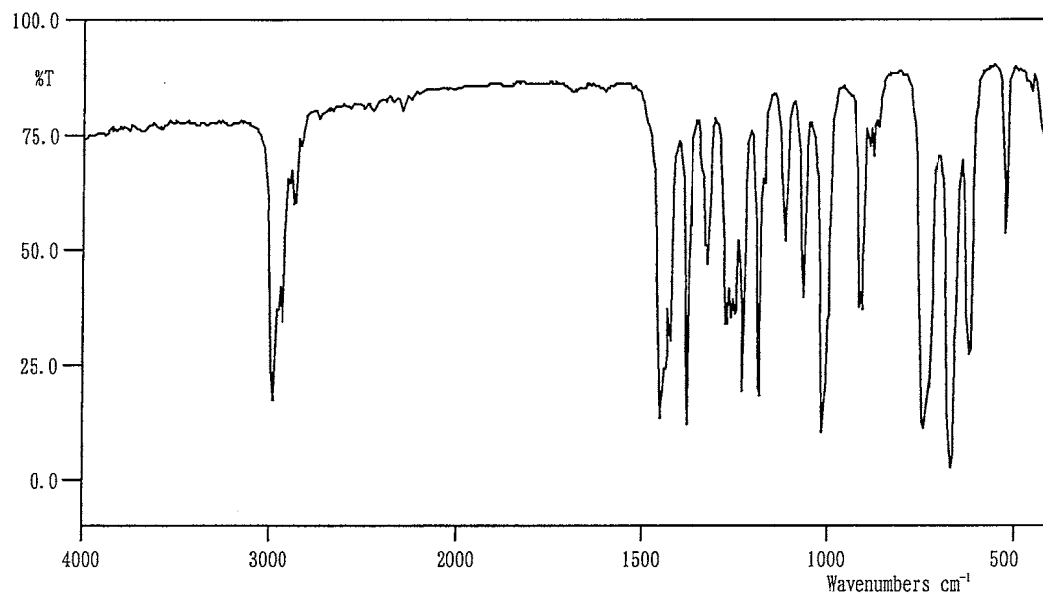
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.
New York, NY:John Wiley and Sons.)

Infrared Spectrometry

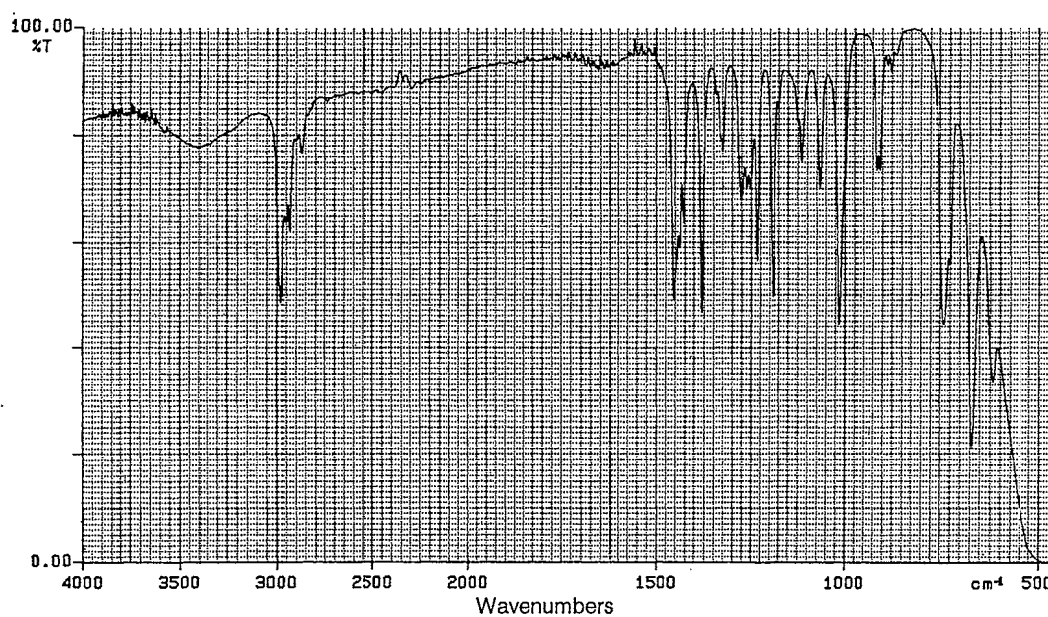
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

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

2. Conclusion: The test substance was identified as 1,2-dichloropropane by the mass spectrum and the infrared spectrum.

B. Lot No. : WAH4634

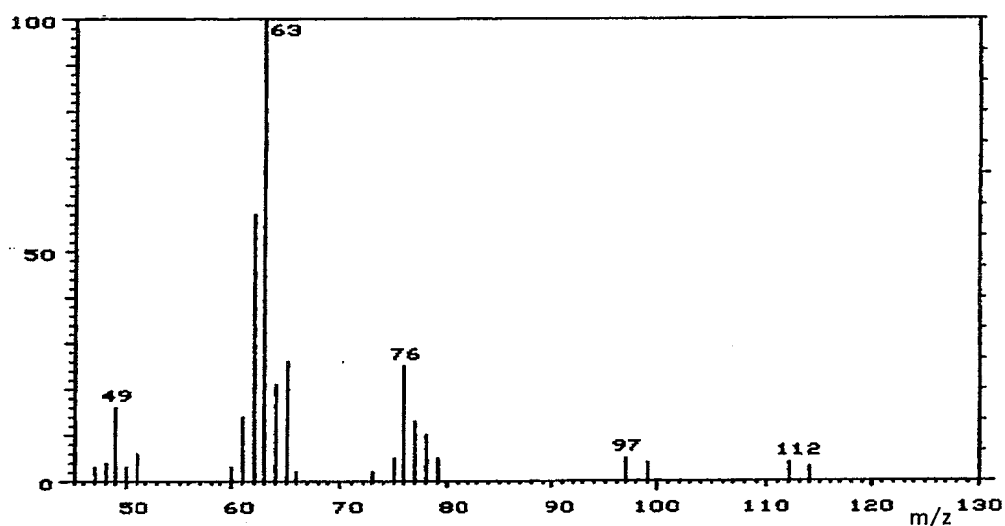
1. Spectral Data

Mass Spectrometry

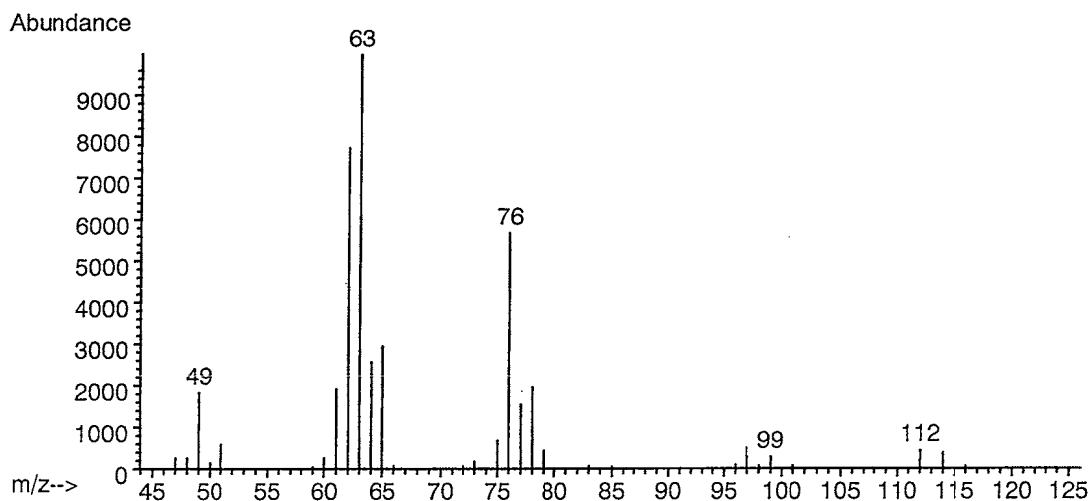
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

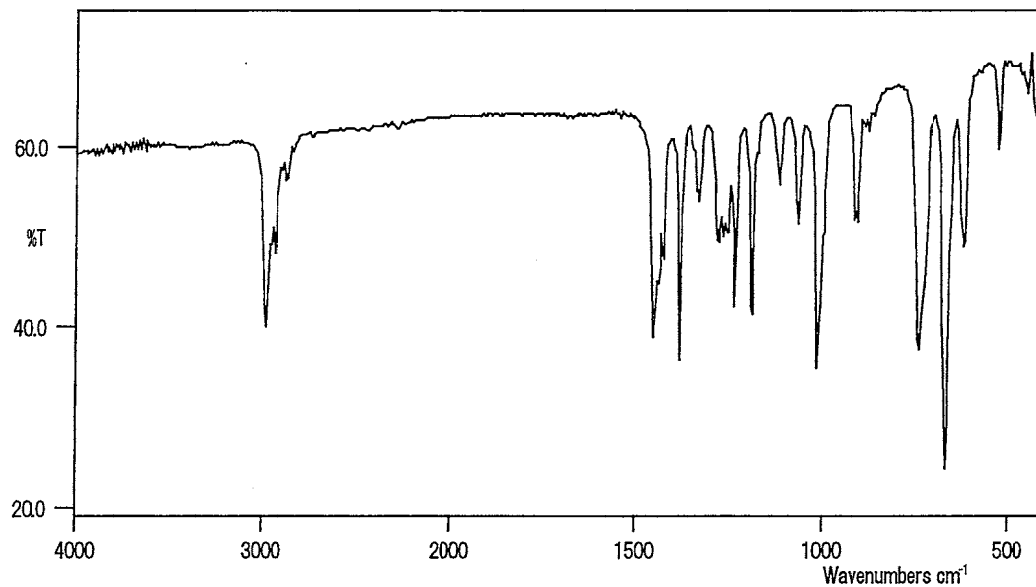
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.
New York, NY:John Wiley and Sons.)

Infrared Spectrometry

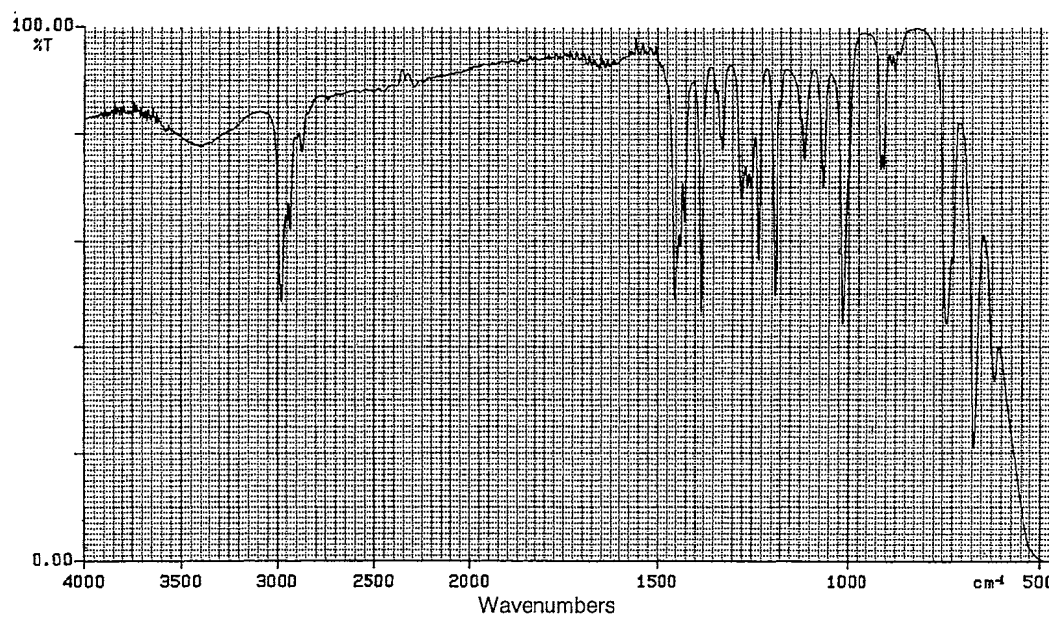
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

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

2. Conclusion: The test substance was identified as 1,2-dichloropropane by the mass spectrum and the infrared spectrum.

C. Lot No. : PKP5800

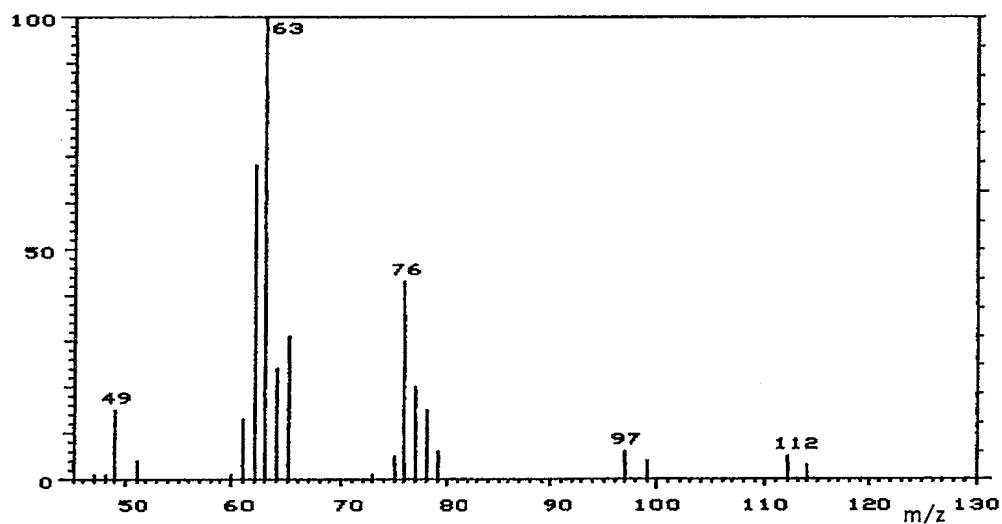
1. Spectral Data

Mass Spectrometry

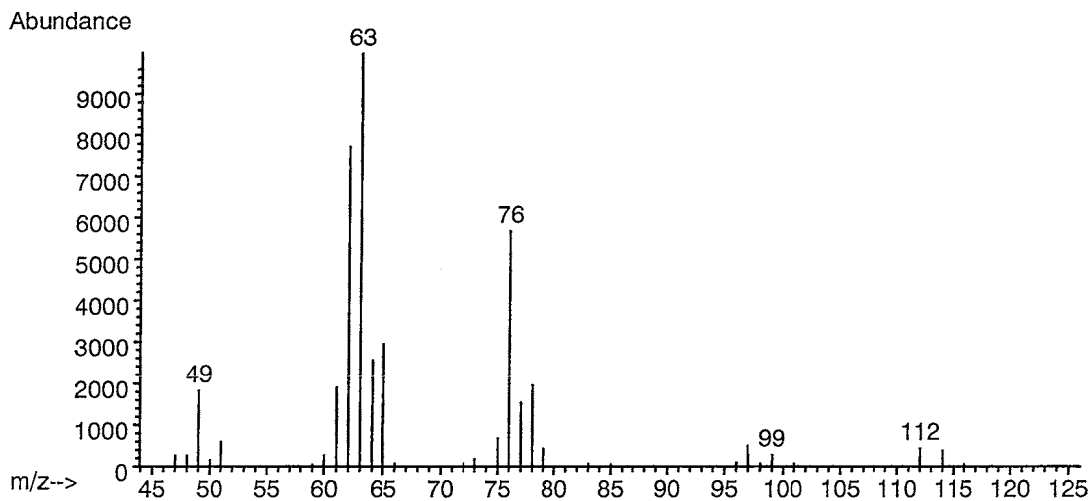
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

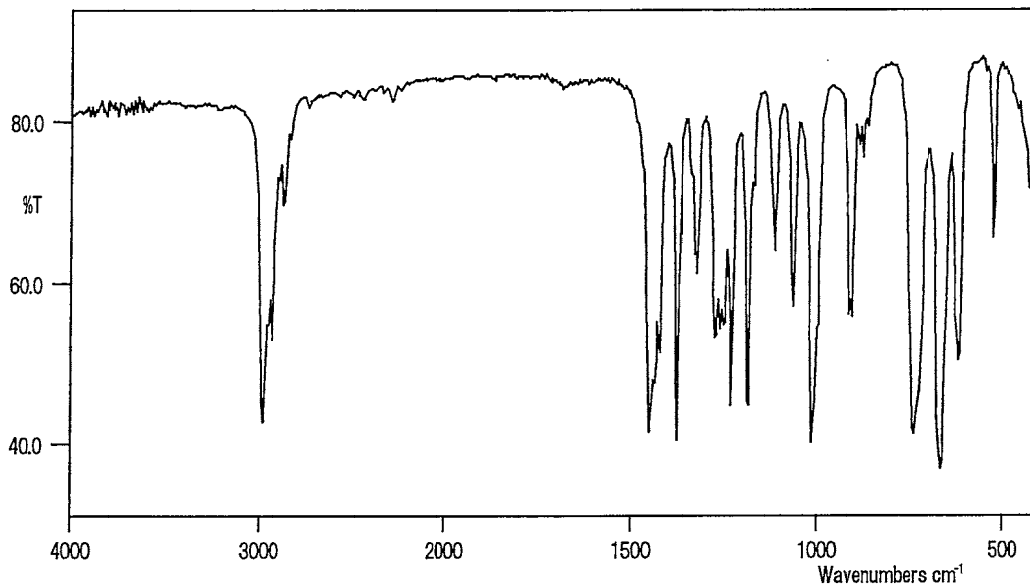
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.
New York, NY:John Wiley and Sons.)

Infrared Spectrometry

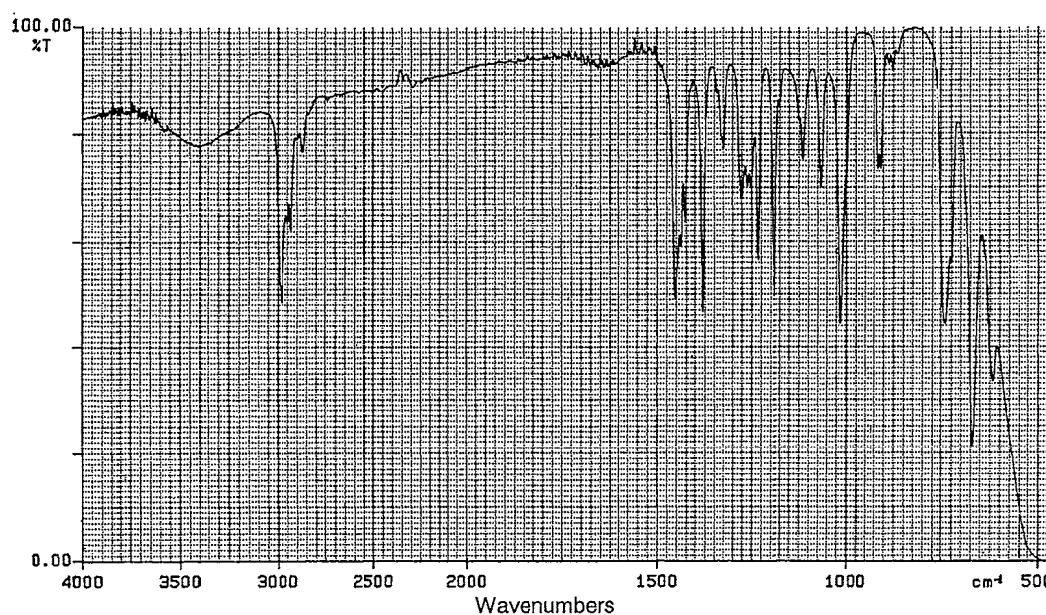
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

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

2. Conclusion: The test substance was identified as 1,2-dichloropropane by the mass spectrum and the infrared spectrum.

D. Lot No. : CER5780

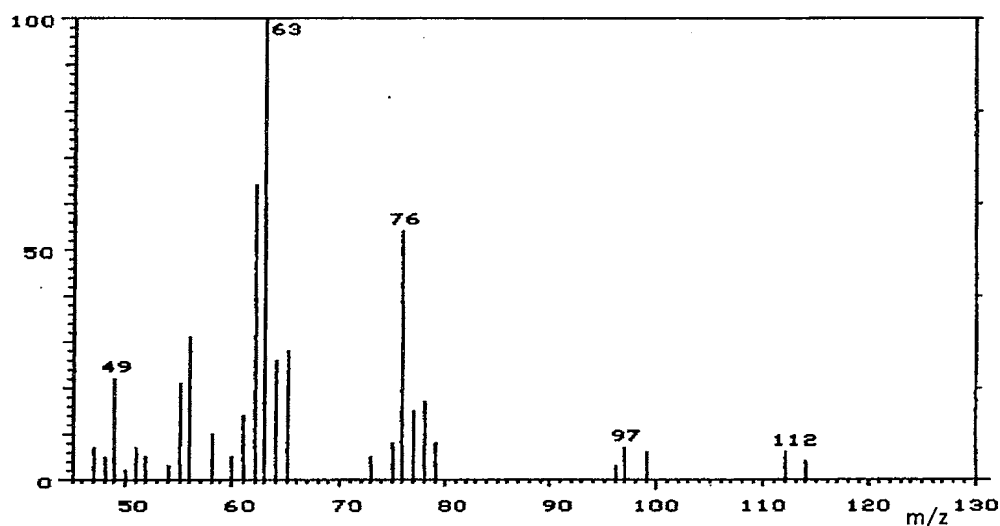
1. Spectral Data

Mass Spectrometry

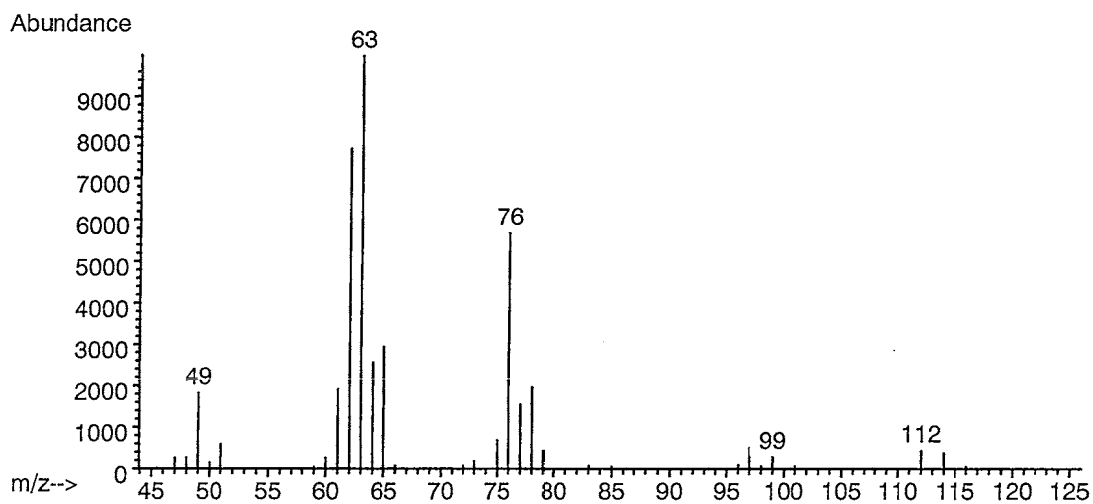
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

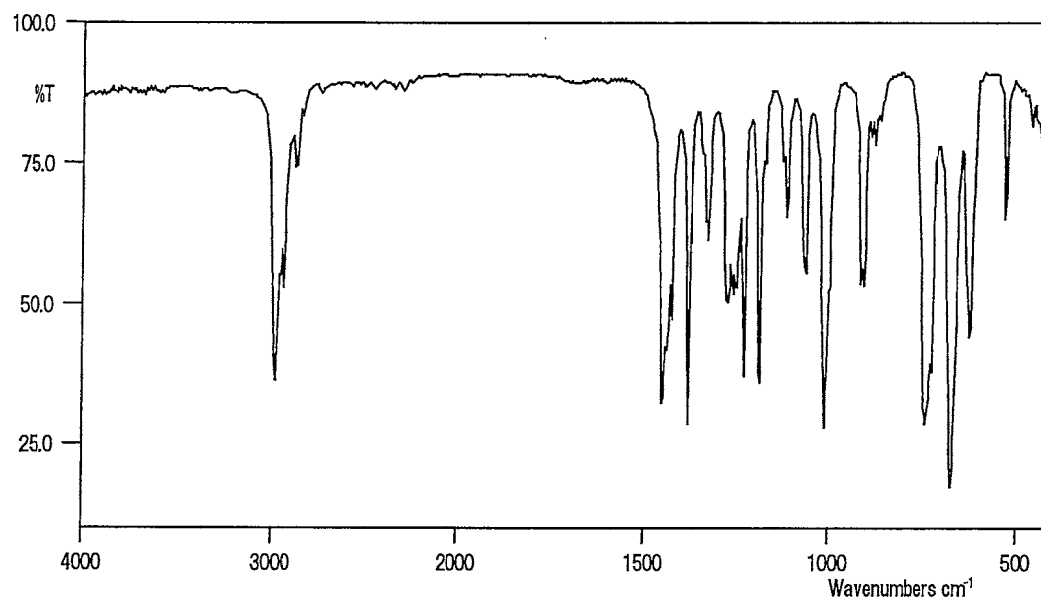
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.
New York, NY:John Wiley and Sons.)

Infrared Spectrometry

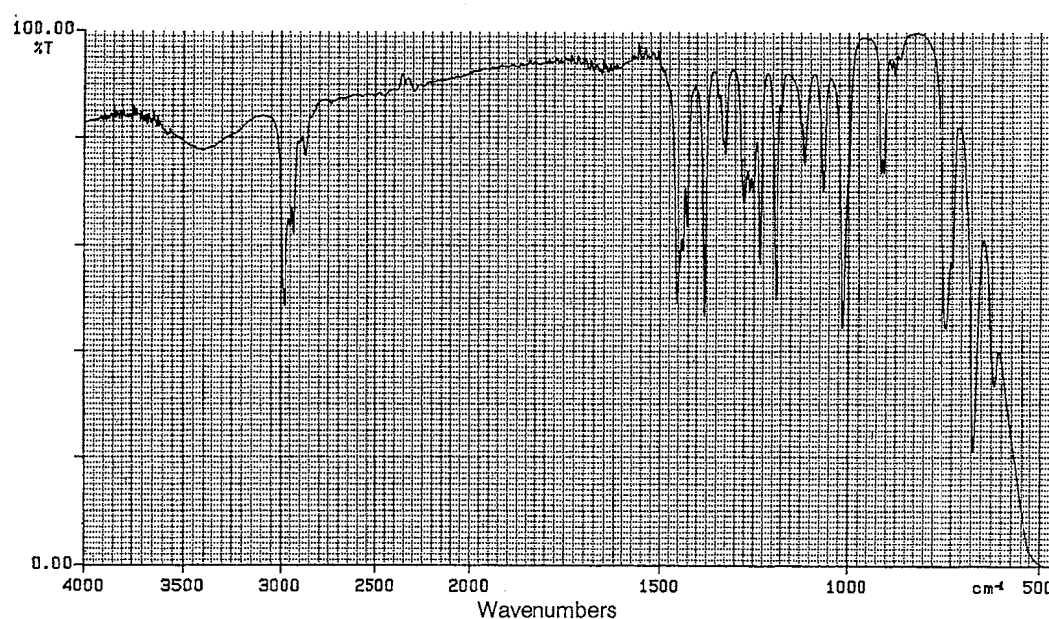
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

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

2. Conclusion: The test substance was identified as 1,2-dichloropropane by the mass spectrum and the infrared spectrum.

E. Lot No. : CEM1032

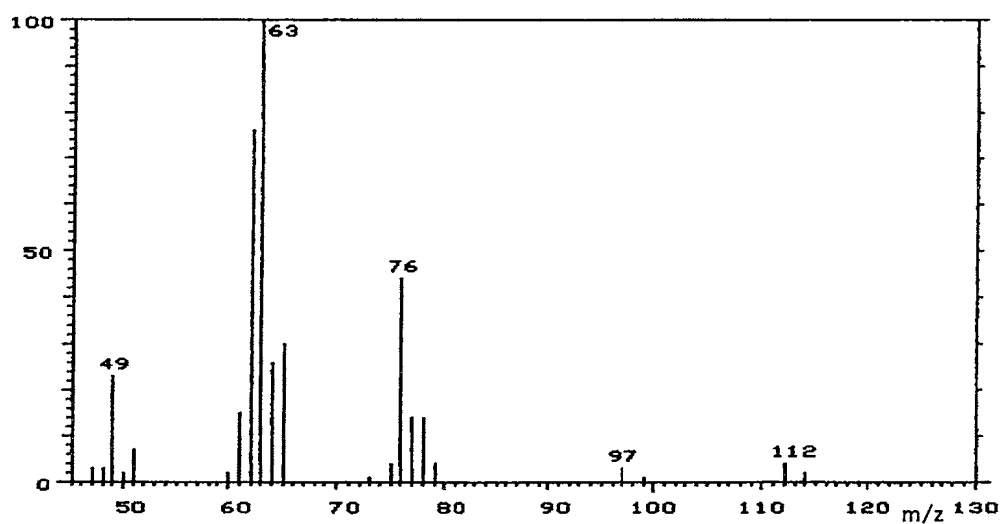
1. Spectral Data

Mass Spectrometry

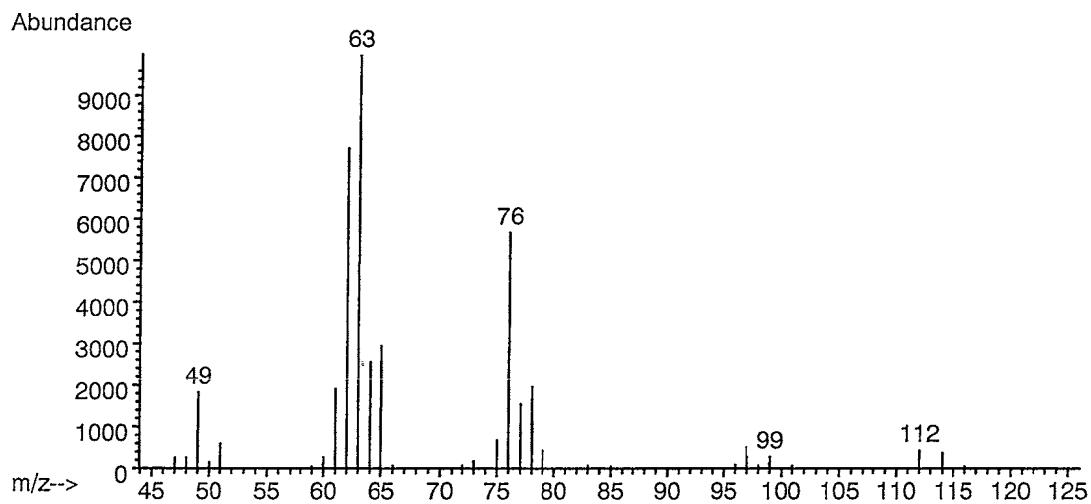
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

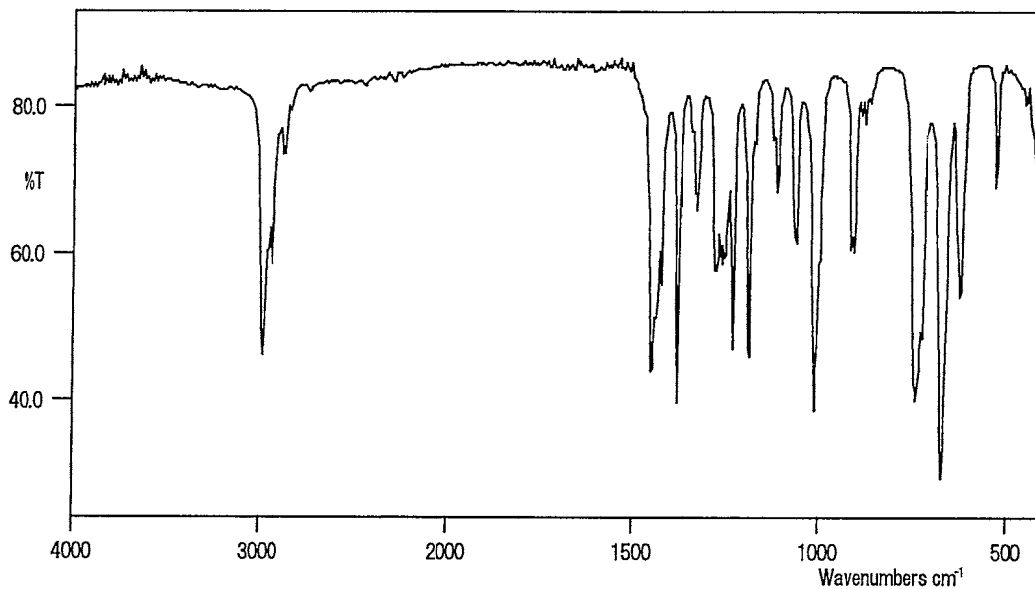
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.
New York, NY:John Wiley and Sons.)

Infrared Spectrometry

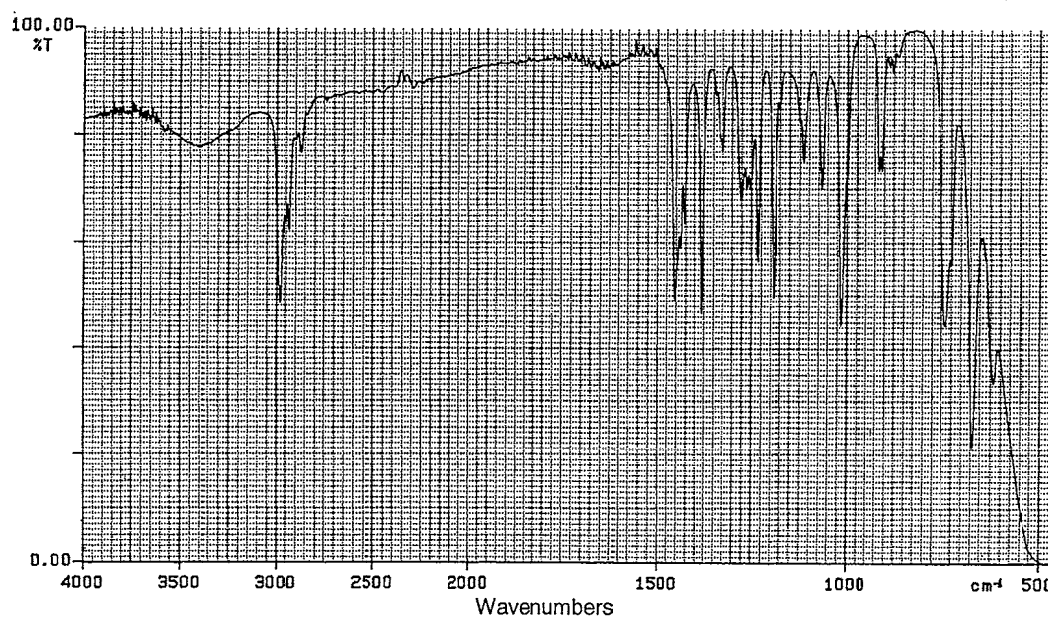
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.

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

2. Conclusion: The test substance was identified as 1,2-dichloropropane by the mass spectrum and the infrared spectrum.

APPENDIX A 2

STABILITY OF 1,2-DICHLOROPROPANE IN THE 2-YEAR INHALATION STUDY

STABILITY OF 1,2-DICHLOROPROPANE IN THE 2-YEAR INHALATION STUDY

Test Substance : 1,2-Dichloropropane (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : LDL5937

1. Sample : This lot was used from 2002.10.2 to 2002.10.21. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 15 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2002.09.30	1	3.479	99.70
	2	4.875	0.30
2002.10.24	1	3.474	99.71
	2	4.876	0.29

Result: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2002.9.30 and one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2002.10.24. No new trace impurity peak in the test substance analyzed on 2002.10.24 was detected.

3. Conclusion: The test substance was stable for about 3 weeks in a dark place at room temperature.

B. Lot No. : WAH4634

1. Sample : This lot was used from 2002.10.22 to 2003.5.12. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 15 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2002.10.17	1	3.474	99.97
	2	4.875	0.03
2003.05.14	1	3.475	99.97
	2	4.872	0.03

Result: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2002.10.17 and one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2003.5.14. No new trace impurity peak in the test substance analyzed on 2003.5.14 was detected.

3. Conclusion: The test substance was stable for about 6 months in a dark place at room temperature.

C. Lot No. : PKP5800

1. Sample : This lot was used from 2003.5.13 to 2004.3.2. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 15 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2003.05.12	1	3.476	99.99
	2	4.873	0.01
2004.03.08	1	3.406	99.99
	2	4.775	0.01

Result: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2003.5.12 and one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2004.3.8. No new trace impurity peak in the test substance analyzed on 2004.3.8 was detected.

3. Conclusion: The test substance was stable for about 9 months in a dark place at room temperature.

D. Lot No. : CER5780

1. Sample : This lot was used from 2004.3.3 to 2004.7.13. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 15 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2004.03.02	1	3.412	99.81
	2	4.781	0.19
2004.07.16	1	3.359	99.81
	2	4.715	0.19

Result: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2004.3.2 and one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2004.7.16. No new trace impurity peak in the test substance analyzed on 2004.7.16 was detected.

3. Conclusion: The test substance was stable for about 4 months in a dark place at room temperature.

E. Lot No. : CEM1032

1. Sample : This lot was used from 2004.7.14 to 2004.9.28. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 15 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2004.07.13	1	3.363	99.98
	2	4.719	0.02
2004.11.02	1	3.359	99.98
	2	4.716	0.02

Result: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2004.7.13 and one major peak (peak No.1) and one impurity (peak No. 2 < 0.5% of total area) analyzed on 2004.11.2. No new trace impurity peak in the test substance analyzed on 2004.11.2 was detected.

3. Conclusion: The test substance was stable for about 3 weeks in a dark place at room temperature.

APPENDIX B

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF 1,2-DICHLOROPROPANE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR
INHALATION STUDY OF 1,2-DICHLOROPROPANE

Group Name	Temperature (°C) Mean ± S.D.	Humidity (%) Mean ± S.D.	Ventilation Rate (L/min) Mean ± S.D.	Air Change (time/h) Mean
Control	23.0 ± 0.0	54.8 ± 1.3	1518.1 ± 12.0	12.0
80 ppm	23.0 ± 0.1	55.1 ± 1.3	1516.9 ± 15.1	12.0
200 ppm	23.0 ± 0.1	56.0 ± 1.5	1522.0 ± 13.1	12.0
500 ppm	23.0 ± 0.1	56.8 ± 1.5	1521.0 ± 13.7	12.0

APPENDIX C 1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 1

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 2

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 3

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	1	1	1	1	1	1	1	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 4

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 5

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	2	2	2	2	2	2	3	3	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 6

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	80 ppm	2	2	2	2	2	2	2	2	4	4	4	4	5	5
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	3	3	3	4	4	5	5	6	6	6	7	7	7	7
MORIBUND SACRIFICE	Control	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
WASTING	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 7

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
DEATH	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	6	6	6	6	6	6	6	6	6	6	6	7	7	7
	200 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	2
	500 ppm	7	7	8	8	8	8	8	8	8	8	8	10	10	10
MORIBUND SACRIFICE	Control	1	1	1	1	1	2	2	3	3	3	3	3	3	3
	80 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	200 ppm	0	0	0	0	0	0	0	0	1	1	2	2	2	2
	500 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	1	1	1	1	1	1	1	1	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	1	1	1	1	2	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0	0	0	0	0	0	1	1	2
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 8

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	3	4	4	4	5	6
	80 ppm	7	7	7	7	7	8
	200 ppm	3	3	5	5	6	7
	500 ppm	10	10	10	10	10	10
MORIBUND SACRIFICE	Control	3	3	3	4	4	4
	80 ppm	3	3	3	3	3	3
	200 ppm	2	2	2	2	2	2
	500 ppm	2	3	3	3	3	4
ATAxic GAIT	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
WASTING	Control	1	1	1	2	1	0
	80 ppm	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	0
	500 ppm	0	0	0	0	0	1
SOILED	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
PILOERECTIOn	Control	1	1	1	1	1	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 9

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 10

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 11

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	1	1	1	1	2	2	2	2	2	2	2	3	3
	80 ppm	0	1	1	1	1	1	1	2	2	2	2	2	2	3
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 12

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	80 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 13

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	80 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	200 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 14

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	80 ppm	5	6	6	6	6	6	6	6	6	6	6	6	6	6
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	1	1	1	1	0	0	1	1	1	1	1	1	1
	80 ppm	2	2	2	2	2	3	3	3	3	3	3	3	3	4
	200 ppm	1	1	1	1	2	2	2	2	2	2	2	2	3	3
	500 ppm	1	1	2	2	2	1	1	1	1	1	2	2	3	2
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 15

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0	0	0	0	0	0	1	1	0
	500 ppm	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	1	1	1	1	1	1	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	4	5	5	5	5	5	5	5	5	5	5	5	5	5
	80 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	4	4	4	4	3	3	3	3	3	5	6	7	7	7
	200 ppm	3	3	3	3	3	4	4	5	4	5	4	5	6	6
	500 ppm	2	2	1	1	1	1	1	1	1	1	1	2	3	5
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 16

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
SOILED PERI-GENITALIA	Control	1	1	1	2	1	0
	80 ppm	0	0	1	1	1	0
	200 ppm	0	1	0	0	0	0
	500 ppm	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CATARACT	Control	5	5	5	5	5	5
	80 ppm	6	6	6	6	6	6
	200 ppm	1	1	1	1	0	0
	500 ppm	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1
	80 ppm	7	7	7	7	8	7
	200 ppm	6	6	5	5	5	6
	500 ppm	4	3	3	4	4	3
INTERNAL MASS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	1
M. NOSE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 17

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 18

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 19

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 20

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 21

Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
M. PERI-MOUTH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	1	1	1
M. MANDIBULAR	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 22

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	1	1	1	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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	1	1	1	1	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 23

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	500 ppm	1	2	1	1	1	1	1	1	1	1	1	1	1	1
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	200 ppm	1	1	1	1	1	1	1	1	0	0	0	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	3

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 24

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. PERI-MOUTH	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	2	2	2	2	2	2
	500 ppm	1	1	1	1	1	0
M. MANDIBULAR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	0
	500 ppm	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1
	200 ppm	1	1	0	0	0	1
	500 ppm	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0
	80 ppm	2	2	2	2	2	2
	200 ppm	1	1	1	1	1	1
	500 ppm	3	2	2	2	2	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 25

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 26

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. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 27

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 28

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 29

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. ANTERIOR, DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 30

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	1	0	1	1	1	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	1	1	1	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 31

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	2	2	2	2	2
	200 ppm	0	0	0	0	0	1	1	1	1	1	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	1
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	1	1	1	1	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 32

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	1
	80 ppm	2	2	2	2	2	2
	200 ppm	1	1	1	1	1	1
	500 ppm	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	1
	500 ppm	0	0	0	1	1	1
ANEMIA	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1
JAUNDICE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
ULCER	Control	0	0	1	1	1	1
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 33

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 34

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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 35

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 36

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 37

Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
PROLAPSE OF PENIS	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 38

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 39

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
PROLAPSE OF PENIS	Control	0	1	1	1	1	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	1	1	1	0	0	0	0	0	0	1	0	0	0
	200 ppm	1	0	0	0	0	0	0	0	0	0	0	1	1	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 40

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
PROLAPSE OF PENIS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	1	1	1	1	1	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	1	1	0
	500 ppm	0	0	0	0	1	2
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	1	1	2	2	2	1
	500 ppm	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	0
	500 ppm	0	0	0	0	0	0

(HAN190)

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STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 41

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 42

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILORECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 43

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 44

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	500 ppm	0	0	0	0	0	0	1	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 45

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	2
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	500 ppm	3	3	4	4	4	4	4	4	4	4	4	4	4	4
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	1	1	1	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	1	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 46

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	3	3	3	3	3	3	3	3	3	3	3	3	4	4
	80 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	200 ppm	3	3	3	4	4	4	4	4	4	4	4	4	4	4
	500 ppm	4	4	4	4	5	5	6	6	6	7	7	7	8	8
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	80 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	1	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 47

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
DEATH	Control	4	4	5	5	5	5	5	5	5	5	6	6	6	6
	80 ppm	2	2	2	2	2	2	2	2	2	2	2	2	4	4
	200 ppm	4	4	4	4	4	4	4	5	5	5	5	6	6	6
	500 ppm	9	9	9	9	9	10	10	11	12	12	13	13	14	14
MORIBUND SACRIFICE	Control	2	2	2	2	2	2	2	2	2	2	4	4	4	4
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	1	1	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 48

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	6	6	7	8	8	8
	80 ppm	5	5	5	6	6	7
	200 ppm	6	6	7	8	8	8
	500 ppm	14	16	16	16	16	17
MORIBUND SACRIFICE	Control	4	4	4	4	5	5
	80 ppm	1	1	1	2	2	2
	200 ppm	2	2	2	2	3	4
	500 ppm	0	0	0	0	0	1
PARALYTIC GAIT	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
WASTING	Control	0	0	0	1	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
PILORECTION	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	1
FROG BELLY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	1

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 49

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 50

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	1	1	1	1	0	0	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 51

Clinical sign	Group Name	Administration Week-day				32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7												
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 52

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 ppm	0	0	0	0	0	0	1	1	1	1	1	1	2	2
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 53

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	3	3	3	3	3	3	3	3	3	3	2	2	2	2
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	2	2	1	1	1	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 54

Clinical sign	Group Name	Administration Week-day			74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		71-7	72-7	73-7											
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	3	3	3	3	2	2	2	2	2	4	4	4	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 55

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	1	1	1	3	2	2	2	3	3	3	3	3	2	2
	200 ppm	0	0	0	0	0	1	1	2	3	4	4	4	4	5
	500 ppm	4	4	4	5	5	5	6	6	5	6	6	6	6	7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 56

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
EXOPHTHALMOS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CATARACT	Control	2	2	3	3	3	3
	80 ppm	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2
	500 ppm	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	2	3	4	4	4	4
	80 ppm	3	3	3	3	4	3
	200 ppm	5	4	4	4	4	4
	500 ppm	7	7	7	7	7	6
INTERNAL MASS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	2	2	2	1	0	0
	500 ppm	1	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 57

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 58

Clinical sign	Group Name	Administration Week-day				18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7												
M. PERI-MOUTH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 59

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 60

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 61

Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
M. PERI-MOUTH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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	1
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
M. ABDOMEN	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 62

Clinical sign	Group Name	Administration Week-day			74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		71-7	72-7	73-7											
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	3	3	3	2	2
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 63

Clinical sign	Group Name	Administration Week-day				88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7												
M. PERI-MOUTH	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	1	2	2	2	2	3
	500 ppm	2	2	2	3	3	3	3	4	4	4	4	4	4	4	5
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0
	200 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 64

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. PERI-MOUTH	Control	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	0
M. NECK	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. BREAST	Control	1	2	3	3	3	3
	80 ppm	0	0	0	1	1	1
	200 ppm	3	3	3	3	3	3
	500 ppm	5	5	5	5	5	3
M. ABDOMEN	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	1	1
	200 ppm	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	80 ppm	1	1	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 65

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 66

Clinical sign	Group Name	Administration Week-day				18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7												
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 67

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 68

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 69

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 70

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	2	2	2	2	1	1	1	1	1	1	1	1	1	1
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	1	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	0	0	0	0	0	0	0	0	0	1	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 71

Clinical sign	Group Name	Administration Week-day				88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7												
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	2	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	500 ppm	0	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	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	1	1	2	2	1	2	2	2	2	2	2	2	2	2
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	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	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. HINDLIMB	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	2
ANEMIA	Control	0	0	0	0	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	1	1	1	0	0
	500 ppm	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CRUSTA	Control	2	2	2	2	2	2
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0
	80 ppm	0	0	0	1	1	1
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 73

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 74

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE : 75

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 76

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 77

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 78

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 79

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 80

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	0
	500 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

(HAN190)

BAIS 4

APPENDIX C 2

CLINICAL OBSERVATION : FEMALE

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 41

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOBRECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 42

Clinical sign	Group Name	Administration Week-day			18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7											
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILORECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 43

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 44

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	500 ppm	0	0	0	0	0	0	1	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 45

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	2
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	500 ppm	3	3	4	4	4	4	4	4	4	4	4	4	4	4
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	1	1	1	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	1	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 46

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	3	3	3	3	3	3	3	3	3	3	3	3	4	4
	80 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	200 ppm	3	3	3	4	4	4	4	4	4	4	4	4	4	4
	500 ppm	4	4	4	4	5	5	6	6	6	7	7	7	8	8
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	80 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	1	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTON	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 47

Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
DEATH	Control	4	4	5	5	5	5	5	5	5	5	6	6	6	6
	80 ppm	2	2	2	2	2	2	2	2	2	2	2	2	4	4
	200 ppm	4	4	4	4	4	4	4	5	5	5	5	6	6	6
	500 ppm	9	9	9	9	9	10	10	11	12	12	13	13	14	14
MORIBUND SACRIFICE	Control	2	2	2	2	2	2	2	2	2	2	4	4	4	4
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	1	1	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 48

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	6	6	7	8	8	8
	80 ppm	5	5	5	6	6	7
	200 ppm	6	6	7	8	8	8
	500 ppm	14	16	16	16	16	17
MORIBUND SACRIFICE	Control	4	4	4	4	5	5
	80 ppm	1	1	1	2	2	2
	200 ppm	2	2	2	2	3	4
	500 ppm	0	0	0	0	0	1
PARALYTIC GAIT	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
WASTING	Control	0	0	0	1	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	1
FROG BELLY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 49

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 50

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	1	1	1	1	0	0	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 51

Clinical sign	Group Name	Administration Week-day			32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7											
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 52

Clinical sign	Group Name	Administration Week-day				46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7												
EXOPHTHALMOS	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	1		1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	3		3	3	3	3	3	3	3	3	3	3	3
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	2	2	2		2	2	2	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	1
	500 ppm	0	0	0		0	0	0	1	1	1	1	1	1	2	2
INTERNAL MASS	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 53

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	3	3	3	3	3	3	3	3	3	3	2	2	2	2
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	2	2	1	1	1	1	1	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 54

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	3	3	3	3	2	2	2	2	2	4	4	4	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 55

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	80 ppm	1	1	1	3	2	2	2	3	3	3	3	3	2	2
	200 ppm	0	0	0	0	0	1	1	2	3	4	4	4	4	5
	500 ppm	4	4	4	5	5	5	6	6	5	6	6	6	6	7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 56

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
EXOPHTHALMOS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
GUM	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CATARACT	Control	2	2	3	3	3	3
	80 ppm	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2
	500 ppm	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	2	3	4	4	4	4
	80 ppm	3	3	3	3	4	3
	200 ppm	5	4	4	4	4	4
	500 ppm	7	7	7	7	7	6
INTERNAL MASS	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	2	2	2	1	0	0
	500 ppm	1	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 57

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR, DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 58

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 59

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 60

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 61

Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
M. PERI-MOUTH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0		0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 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	1
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
M. ABDOMEN	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 62

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	3	3	3	2	2
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 63

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. PERI-MOUTH	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	2	2	2	2	3
	500 ppm	2	2	2	3	3	3	4	4	4	4	4	4	4	5
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	1	1	1	1	1	0	0
	200 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 64

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. PERI-MOUTH	Control	1	1	1	1	1	1
	80 ppm	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	0
M. NECK	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. BREAST	Control	1	2	3	3	3	3
	80 ppm	0	0	0	1	1	1
	200 ppm	3	3	3	3	3	3
	500 ppm	5	5	5	5	5	3
M. ABDOMEN	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	1	1
	200 ppm	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	80 ppm	1	1	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 65

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 66

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. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 67

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 68

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 69

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 70

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	2	2	2	2	1	1	1	1	1	1	1	1	1	1
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	1	1	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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	0	0	0	0	0	0	0	0	0	1	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 71

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	2	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	500 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	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	1	1	2	2	1	2	2	2	2	2	2	2	2
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. HINDLIMB	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0
	80 ppm	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	2
ANEMIA	Control	0	0	0	0	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	1	1	1	0	0
	500 ppm	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CRUSTA	Control	2	2	2	2	2	2
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0
	80 ppm	0	0	0	1	1	1
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 73

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 74

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 75

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 76

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 77

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 78

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

(HAN190)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 79

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 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	1	0	0	0	0
	80 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 80

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
VAGINAL PROLAPSE	Control	0	0	0	0	0	0
	80 ppm	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	0
	500 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0
	80 ppm	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0

(HAN190)

BAIS 4

APPENDIX D 1

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration		week-day									
	0-0		1-7		2-7		3-7		4-7		5-7	
Control	122±	5	153±	8	185±	9	212±	10	232±	11	250±	12
80 ppm	122±	5	144±	7**	177±	9**	200±	11**	221±	12**	241±	13**
200 ppm	122±	5	142±	6**	173±	8**	194±	10**	214±	11**	233±	12**
500 ppm	122±	5	138±	7**	168±	9**	187±	11**	204±	13**	223±	13**

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration		week-day									
	7-7		8-7		9-7		10-7		11-7		12-7	
Control	278±	13	292±	14	301±	15	307±	15	314±	15	321±	15
80 ppm	266±	15**	277±	15**	287±	15**	294±	16**	302±	16**	309±	16**
200 ppm	256±	14**	269±	15**	277±	16**	285±	16**	290±	17**	299±	16**
500 ppm	246±	15**	258±	16**	267±	16**	274±	17**	280±	17**	288±	18**

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration		week-day									
	14-7		18-7		22-7		26-7		30-7		34-7	
Control	332±	16	347±	16	363±	17	375±	18	383±	19	391±	19
80 ppm	315±	17**	330±	18**	345±	18**	356±	19**	364±	20**	371±	22**
200 ppm	304±	17**	318±	18**	334±	19**	346±	20**	355±	21**	364±	23**
500 ppm	293±	18**	309±	20**	324±	22**	336±	23**	346±	25**	356±	26**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration		week-day									
	42-7		46-7		50-7		54-7		58-7		62-7	
Control	405±	21	411±	21	420±	22	421±	23	424±	23	426±	24
80 ppm	385±	23**	390±	25**	399±	27**	401±	28**	402±	29**	405±	30**
200 ppm	379±	24**	383±	25**	392±	27**	396±	27**	397±	26**	400±	28**
500 ppm	373±	28**	377±	30**	386±	33**	387±	35**	389±	34**	392±	36**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration		week-day									
	70-7		74-7		78-7		82-7		86-7		90-7	
Control	430±	24	431±	24	432±	29	428±	29	424±	34	423±	35
80 ppm	407±	32**	409±	25**	410±	24**	409±	24**	407±	27*	408±	26
200 ppm	402±	27**	403±	27**	405±	26**	404±	25**	402±	26**	401±	30**
500 ppm	395±	34**	394±	34**	393±	33**	391±	31**	388±	29**	386±	31**

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

Test of Dunnett

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration		week-day			
	98-7		102-7		104-7	
Control	416±	38	407±	44	409±	26
80 ppm	403±	29	400±	40	396±	47
200 ppm	387±	33**	382±	42**	382±	32**
500 ppm	380±	48**	381±	75**	362±	41**

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

Test of Dunnett

APPENDIX D 2

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration		week-day									
	0-0		1-7		2-7		3-7		4-7		5-7	
Control	96±	3	111±	4	124±	5	134±	5	142±	7	150±	7
80 ppm	96±	3	106±	4**	119±	5**	129±	5**	136±	6**	145±	6**
200 ppm	96±	3	105±	4**	118±	5**	127±	5**	135±	6**	144±	6**
500 ppm	96±	3	103±	4**	117±	4**	124±	5**	133±	6**	141±	7**

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

Test of Dunnett

(HAN260)

BAYS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration		week-day									
	7-7		8-7		9-7		10-7		11-7		12-7	
Control	160±	9	165±	9	170±	10	173±	10	176±	11	179±	11
80 ppm	156±	7*	160±	7**	164±	7*	167±	8**	172±	9*	174±	8
200 ppm	152±	6**	157±	6**	160±	7**	165±	7**	167±	7**	171±	7**
500 ppm	151±	8**	156±	8**	160±	9**	164±	9**	166±	8**	170±	9**

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration		week-day									
	14-7		18-7		22-7		26-7		30-7		34-7	
Control	183±	11	189±	11	196±	11	201±	12	205±	12	208±	12
80 ppm	176±	8**	182±	8*	188±	8**	194±	9**	200±	10*	202±	10
200 ppm	171±	7**	179±	7**	187±	9**	194±	8**	199±	8*	203±	9
500 ppm	169±	8**	177±	9**	186±	10**	194±	12**	200±	13*	204±	14

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration		week-day									
	42-7		46-7		50-7		54-7		58-7		62-7	
Control	214±	13	220±	14	225±	16	227±	17	229±	17	234±	19
80 ppm	210±	10	216±	12	219±	13	221±	14	224±	14	228±	16
200 ppm	212±	10	217±	11	225±	12	226±	12	227±	19	232±	16
500 ppm	212±	14	217±	15	224±	16	226±	17	228±	17	232±	19

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration		week-day									
	70-7		74-7		78-7		82-7		86-7		90-7	
Control	243±	22	247±	22	255±	24	257±	25	258±	26	262±	28
80 ppm	237±	17	240±	18	244±	18*	248±	18	249±	18	252±	18
200 ppm	240±	19	247±	18	250±	19	253±	18	258±	20	260±	22
500 ppm	238±	19	240±	20	241±	20**	240±	21**	241±	21**	243±	21**

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 12

Group Name	Administration		week-day			
	98-7		102-7		104-7	
Control	268±	31	267±	37	267±	37
80 ppm	253±	23*	254±	19	252±	19
200 ppm	264±	20	264±	29	266±	22
500 ppm	243±	26**	245±	30**	246±	34**

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

Test of Dunnett

APPENDIX E 1

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration 1-7(6)	week-day(effective) 2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	15.7± 1.4	16.1± 1.2	16.6± 1.0	17.5± 1.0	17.0± 1.2	17.0± 1.2	16.7± 1.2
80 ppm	13.5± 0.9**	15.2± 1.1**	15.8± 1.0**	17.0± 0.9	17.2± 1.3	16.7± 1.1	16.7± 1.3
200 ppm	13.1± 0.9**	14.5± 1.0**	14.9± 0.9**	16.9± 1.2**	16.6± 1.1	15.9± 1.1**	16.0± 1.0**
500 ppm	12.3± 0.8**	14.6± 1.1**	14.8± 1.0**	16.8± 1.1**	16.4± 1.1*	16.2± 1.0**	16.2± 1.1

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration 8-7(7)	week-day(effective) 9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	17.0± 1.0	16.8± 1.0	16.9± 0.9	16.4± 1.0	16.4± 1.0	16.0± 1.0	16.5± 1.0
80 ppm	16.7± 1.0	16.6± 1.1	16.9± 1.1	16.2± 0.9	16.4± 1.0	15.9± 1.0	15.4± 0.9**
200 ppm	15.9± 1.1**	16.0± 1.1**	16.1± 1.2**	15.6± 1.1**	15.5± 1.0**	15.4± 1.1**	14.4± 1.1**
500 ppm	15.8± 1.1**	16.0± 1.1**	15.7± 1.1**	15.5± 1.0**	15.1± 1.0**	14.8± 0.9**	14.0± 0.9**

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration 18-7(7)	week-day(effective) 22-7(7)	26-7(7)	30-7(7)	34-7(7)	38-7(7)	42-7(7)
Control	16.3± 0.8	16.5± 1.0	16.5± 0.9	16.7± 1.0	16.7± 1.0	16.9± 1.0	17.2± 1.0
80 ppm	15.7± 1.1**	16.2± 1.0	15.9± 1.0**	16.2± 0.9*	16.3± 1.0	16.5± 1.1	16.9± 1.1
200 ppm	14.9± 1.0**	15.5± 1.1**	15.5± 1.0**	16.0± 1.1**	16.3± 1.1	16.4± 1.1	16.7± 0.9
500 ppm	14.9± 1.1**	15.3± 1.2**	15.2± 1.1**	16.0± 1.7**	16.0± 1.5**	16.4± 1.4	16.7± 1.3

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration 46-7(7)	week-day(effective) 50-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	17.1± 0.9	17.3± 1.0	16.7± 1.1	16.9± 1.1	16.7± 1.1	17.0± 1.1	16.9± 1.0
80 ppm	16.7± 1.1	17.3± 1.2	16.7± 1.2	16.7± 1.1	16.5± 1.1	16.3± 1.1*	16.4± 1.1
200 ppm	16.4± 1.1**	17.0± 1.1	16.4± 1.0	16.4± 1.1	16.4± 1.0	16.3± 1.0**	16.4± 1.1
500 ppm	16.5± 1.4**	16.8± 1.5	16.4± 1.6	16.3± 1.4*	16.3± 1.3	16.2± 1.2**	16.4± 1.3

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration 74-7(7)	week-day(effective) 78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	16.6± 1.1	16.9± 1.2	16.5± 1.0	16.8± 1.7	16.8± 1.5	16.9± 1.4	16.6± 1.4
80 ppm	16.5± 0.9	16.3± 1.3	16.5± 1.1	16.8± 1.5	16.8± 1.4	17.3± 1.2	16.6± 2.2
200 ppm	16.4± 1.1	16.7± 1.2	16.5± 1.3	16.7± 1.5	16.9± 2.7	16.1± 2.4	15.6± 2.2**
500 ppm	16.1± 1.8	16.2± 1.2*	16.1± 1.4	16.2± 1.4	16.6± 1.3	16.6± 1.8	15.7± 2.4*

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

Test of Dunnett

STUDY NO. : 0457
ANIMAL : RAT F344/DuCrj
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week-day(effective)	
	102-7(7)	104-7(7)
Control	16.6± 1.6	16.5± 1.4
80 ppm	17.0± 2.0	16.2± 2.3
200 ppm	16.1± 2.9	16.2± 1.3
500 ppm	16.0± 1.9	15.2± 2.6

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

Test of Dunnett

APPENDIX E 2

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week-day(effective)						
	1-7(6)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	11.8± 0.8	10.9± 0.6	11.1± 0.7	11.4± 0.6	11.2± 0.8	11.0± 0.8	10.7± 0.9
80 ppm	10.6± 0.8**	10.5± 0.9*	11.1± 1.0	11.3± 0.8	11.8± 0.8**	11.2± 0.8	11.3± 1.1**
200 ppm	9.9± 0.6**	10.8± 1.0	10.4± 0.9**	11.5± 0.8	11.1± 0.6	11.0± 0.8	10.5± 0.7
500 ppm	9.4± 0.8**	11.1± 1.2	10.5± 0.6**	11.7± 0.9	11.4± 0.7	11.3± 0.7	10.9± 0.7

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration 8-7(7)	week-day(effective) 9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	10.7± 0.9	11.1± 1.1	11.0± 1.0	11.0± 1.2	10.6± 1.0	10.9± 1.1	10.7± 0.8
80 ppm	10.6± 0.8	11.1± 0.9	11.1± 1.1	10.9± 1.2	10.9± 1.1	11.0± 1.2	10.5± 0.9
200 ppm	10.8± 0.9	10.4± 0.8**	10.9± 0.8	10.2± 0.8**	10.6± 0.9	10.0± 0.7**	9.9± 0.7**
500 ppm	11.2± 1.0*	10.9± 0.9	11.3± 0.9	10.6± 0.9	10.8± 0.8	10.3± 0.7*	9.9± 0.8**

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration 18-7(7)	week-day(effective) 22-7(7)	26-7(7)	30-7(7)	34-7(7)	38-7(7)	42-7(7)
Control	10.6± 1.0	10.5± 1.0	10.9± 1.0	11.2± 1.1	10.5± 1.0	11.2± 0.7	11.1± 0.8
80 ppm	10.5± 0.6	10.7± 0.8	10.8± 0.8	11.3± 1.9	10.7± 0.7	11.2± 0.7	11.6± 0.9*
200 ppm	10.7± 0.9	11.2± 1.0**	10.9± 0.8	11.5± 0.9	11.3± 1.0**	11.9± 1.1**	11.9± 1.0**
500 ppm	10.8± 1.5	11.2± 1.0**	11.2± 1.5	11.8± 1.4*	11.6± 1.3**	11.8± 1.2*	12.0± 0.9**

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week-day(effective)						
	46-7(7)	50-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	11.4± 0.9	11.4± 0.9	10.8± 0.9	11.1± 1.1	11.3± 1.4	11.3± 1.1	11.7± 1.2
80 ppm	11.6± 0.9	11.2± 0.8	11.2± 0.8*	11.5± 0.9	11.5± 0.9	11.3± 1.0	11.8± 0.9
200 ppm	12.0± 1.0**	12.3± 1.0**	11.4± 0.9**	11.5± 2.0*	12.0± 0.8**	11.8± 0.8	12.0± 0.9
500 ppm	12.1± 1.2**	12.4± 1.3**	11.9± 0.9**	11.7± 1.1*	12.1± 1.1*	12.1± 1.0**	12.0± 1.2

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

Test of Dunnett

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCrj
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration		week-day(effective)					
	74-7(7)		78-7(7)		82-7(7)		86-7(7)	
Control	11.7± 1.0		12.0± 1.2		11.8± 1.1		12.5± 1.2	
80 ppm	11.8± 0.9		12.1± 0.9		11.9± 0.8		12.4± 1.0	
200 ppm	12.4± 0.9**		12.3± 1.0		12.2± 0.9		12.8± 1.1	
500 ppm	11.7± 1.2		12.1± 1.2		11.8± 1.1		12.3± 1.2	

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

Test of Dunnett

STUDY NO. : 0457
ANIMAL : RAT F344/DuCrj
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week-day(effective)	
	102-7(7)	104-7(7)
Control	12.9± 2.5	12.7± 2.3
80 ppm	12.6± 1.0	11.9± 1.4
200 ppm	12.4± 2.0	12.4± 1.0
500 ppm	12.5± 1.4	12.6± 1.8

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

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX F 1

HEMATOLOGY : MALE

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ⁹ /μl	
Control	40	8.21±	1.25	14.1±	2.5	41.0±	5.8	50.2±	3.5	17.2±	1.4	34.2±	1.8	871±	242
80 ppm	39	8.43±	1.56	14.3±	2.7	41.8±	6.7	50.4±	7.2	17.2±	2.0	34.1±	1.8	763±	257
200 ppm	41	8.52±	1.23	14.6±	2.4	42.5±	5.9	50.0±	3.0	17.1±	1.4	34.2±	1.6	840±	259
500 ppm	36	8.54±	1.63	14.5±	3.4	43.0±	9.1	50.3±	3.4	16.9±	1.6	33.5±	1.9	825±	319

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	40	5.85±	1.47	0±	1	46±	10	2±	1	0±	0	5±	2	45±	9	2±	4
80 ppm	39	11.11±	25.55	0±	0	44±	10	1±	1	0±	0	5±	2	44±	12	6±	18
200 ppm	41	5.59±	1.40	0±	1	49±	6	1±	1	0±	0	5±	2	43±	7	2±	2
500 ppm	36	5.04±	1.49*	0±	1	48±	8	1±	1	0±	0	5±	1	43±	8	2±	4

Significant difference ; * : P ≤ 0.05

** : P ≤ 0.01

Test of Dunnett

(HCL070)

BAIS 4

APPENDIX F 2

HEMATOLOGY : FEMALE

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ³ /μl	
Control	37	7.96±	1.13	14.8±	1.9	41.5±	4.8	52.7±	4.8	18.7±	1.1	35.6±	1.2	573±	110
80 ppm	41	7.90±	1.06	14.7±	2.0	41.3±	4.7	52.7±	4.2	18.6±	1.3	35.3±	1.7	589±	136
200 ppm	38	8.03±	0.52	15.0±	0.8	42.1±	2.0	52.5±	1.6	18.7±	0.5	35.5±	0.6	614±	113
500 ppm	32	7.67±	0.78*	14.5±	1.5	41.4±	3.5	54.1±	1.9**	18.9±	0.7	34.9±	1.2**	626±	84

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	37	9.86±	38.94	0±	1	41±	13	2±	1	0±	0	4±	2	47±	13	5±	16
80 ppm	41	3.85±	4.44	0±	1	38±	8	2±	1	0±	0	4±	2	51±	11	5±	15
200 ppm	38	2.91±	0.73	0±	1	42±	7	1±	1*	0±	0	5±	2	50±	7	1±	1
500 ppm	32	7.84±	20.49	0±	1	45±	13	1±	1**	0±	0	4±	2	45±	14	4±	16

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

APPENDIX G 1

BIOCHEMISTRY : MALE

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	40	6.7±	0.3	3.0±	0.3	0.8±	0.1	0.18±	0.10	162±	17	187±	62	116±	94
80 ppm	39	6.7±	0.4	3.1±	0.2	0.9±	0.1	0.21±	0.16	159±	25	182±	47	99±	64
200 ppm	41	6.6±	0.3	3.0±	0.2	0.8±	0.1	0.15±	0.02	162±	20	181±	62	101±	88
500 ppm	36	6.5±	0.5	3.0±	0.3	0.9±	0.1	0.17±	0.04	161±	34	157±	58	104±	101

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/l		ALT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CK IU/l	
Control	40	256±	70	92±	53	40±	13	170±	49	221±	60	8±	6	105±	30
80 ppm	39	256±	77	132±	185	47±	35	232±	350	239±	101	10±	11	187±	443
200 ppm	41	252±	87	83±	29	37±	15	161±	50	201±	45	7±	4	100±	21
500 ppm	36	230±	91	115±	164	48±	73	202±	152	214±	123	6±	5	141±	219

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0457

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 Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	40	19.3±	3.2	0.6±	0.1	142±	1	3.5±	0.2	105±	1	10.6±	0.5	4.2±	0.6
80 ppm	39	19.5±	2.2	0.6±	0.1	142±	1	3.7±	0.3	105±	1	10.3±	0.3	4.0±	0.7
200 ppm	41	19.5±	3.1	0.6±	0.1	142±	1	3.6±	0.3	105±	2	10.4±	0.3	4.0±	0.6
500 ppm	36	21.7±	15.4	0.6±	0.1	142±	1	3.8±	0.4**	105±	2	10.3±	0.5	4.3±	1.4

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

Test of Dunnett

(HCL074)

BAIS 4

APPENDIX G 2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	37	7.0±	0.4	3.6±	0.3	1.1±	0.2	0.24±	0.34	147±	15	157±	102	153±	360
80 ppm	41	7.0±	0.4	3.6±	0.3	1.1±	0.1	0.16±	0.08	150±	16	143±	46	63±	59
200 ppm	38	6.8±	0.4	3.6±	0.3	1.1±	0.1	0.15±	0.03	154±	17	142±	39	67±	95
500 ppm	32	6.8±	0.4	3.5±	0.4	1.1±	0.2	0.15±	0.04	150±	20	126±	22	47±	24

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/l		ALT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CK IU/l	
Control	37	277±	161	159±	193	72±	74	322±	621	160±	101	3±	2	129±	155
80 ppm	41	249±	73	148±	151	65±	46	215±	135	148±	102	3±	2	93±	28
200 ppm	38	239±	72	134±	60	62±	27	208±	73	132±	47	3±	2	86±	13
500 ppm	32	216±	29	142±	84	65±	45	202±	88	233±	439	5±	4**	95±	27

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	37	17.3±	1.9	0.5±	0.1	141±	2	3.3±	0.4	103±	2	10.5±	0.4	3.9±	0.7
80 ppm	41	18.4±	2.3*	0.5±	0.1	141±	2	3.3±	0.3	103±	2	10.5±	0.4	3.9±	0.8
200 ppm	38	17.5±	1.8	0.5±	0.0	141±	1	3.4±	0.3	103±	2	10.5±	0.4	3.9±	0.7
500 ppm	32	17.8±	2.8	0.5±	0.0	141±	2	3.5±	0.4	103±	2	10.3±	0.3	3.9±	1.0

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

Test of Dunnett

(HCL074)

BAIS 4

APPENDIX H 1

URINALYSIS : MALE

STUDY NO. : 0457

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Bilirubin				CHI		
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-		+	2+
Control	41	0	1	5	4	15	14	2		0	0	2	5	30	4		41	0	0	0	0	0		40	1	0	0	0	0		41	0	0	0
80 ppm	40	0	0	4	10	16	8	2		0	0	0	1	35	4		40	0	0	0	0	0		38	1	1	0	0	0		39	1	0	0
200 ppm	42	0	0	4	12	19	6	1		0	0	2	3	30	7		42	0	0	0	0	0		37	4	1	0	0	0		42	0	0	0
500 ppm	37	0	0	3	8	18	8	0		0	0	1	4	29	3		37	0	0	0	0	0		35	2	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

STUDY NO. : 0457

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		--	±	+	2+	3+		±	+	2+	3+	4+	
Control	41	41	0	0	0	0		41	0	0	0	0	
80 ppm	40	39	0	0	1	0		40	0	0	0	0	
200 ppm	42	41	0	0	0	1		42	0	0	0	0	
500 ppm	37	36	0	0	1	0		37	0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BAIS 4

APPENDIX H 2

URINALYSIS : FEMALE

STUDY NO. : 0457

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

URINALYSIS

PAGE : 3

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Bilirubin				CHI			
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-		+	2+	3+
Control	38	0	1	4	4	6	17	6		0	3	7	8	11	9		38	0	0	0	0	0		20	17	1	0	0	0		37	0	0	1	
80 ppm	42	0	0	4	6	10	20	2		0	6	12	14	7	3		42	0	0	0	0	0		22	19	1	0	0	0		41	0	0	1	
200 ppm	39	0	0	1	5	9	17	7		0	4	9	8	14	4		39	0	0	0	0	0		16	23	0	0	0	0		39	0	0	0	
500 ppm	34	0	1	1	2	6	21	3		2	3	7	11	10	1		34	0	0	0	0	0		14	15	4	1	0	0		33	1	0	0	

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0457

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		-	±	+	2+	3+		±	+	2+	3+	4+	
Control	38	37	0	0	0	0	1	38	0	0	0	0	0
80 ppm	42	40	0	1	0	0	1	41	0	1	0	0	0
200 ppm	39	37	2	0	0	0	0	39	0	0	0	0	0
500 ppm	34	33	1	0	0	0	0	34	0	0	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 1

APPENDIX I 1

GROSS FINDINGS : MALE

ALL ANIMALS

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		1	(2)	4	(8)	4	(8)	3	(6)
	scab		1	(2)	0	(0)	0	(0)	0	(0)
subcutis	jaundice		0	(0)	0	(0)	1	(2)	2	(4)
	mass		3	(6)	6	(12)	9	(18)	6	(12)
lung	white zone		3	(6)	5	(10)	4	(8)	3	(6)
	red zone		0	(0)	1	(2)	0	(0)	0	(0)
	brown zone		0	(0)	0	(0)	0	(0)	1	(2)
	edema		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		2	(4)	0	(0)	0	(0)	1	(2)
lymph node	enlarged		2	(4)	2	(4)	1	(2)	0	(0)
thymus	nodule		0	(0)	0	(0)	1	(2)	0	(0)
spleen	enlarged		8	(16)	4	(8)	4	(8)	7	(14)
	white zone		1	(2)	0	(0)	1	(2)	1	(2)
	red zone		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		2	(4)	0	(0)	0	(0)	0	(0)
	deformed		1	(2)	0	(0)	1	(2)	0	(0)
heart	hypertrophy		0	(0)	1	(2)	1	(2)	0	(0)
tongue	nodule		0	(0)	1	(2)	1	(2)	0	(0)
salivary gl	nodule		0	(0)	0	(0)	0	(0)	1	(2)
forestomach	nodule		2	(4)	0	(0)	1	(2)	0	(0)
	ulcer		0	(0)	0	(0)	1	(2)	1	(2)
	erosion		0	(0)	0	(0)	0	(0)	1	(2)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
gl stomach	red zone		0	(0)	0	(0)	0	(0)	2	(4)
	black zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	ulcer		0	(0)	1	(2)	0	(0)	0	(0)
small intes	nodule		0	(0)	0	(0)	1	(2)	1	(2)
cecum	nodule		0	(0)	0	(0)	1	(2)	0	(0)
liver	enlarged		2	(4)	0	(0)	1	(2)	1	(2)
	white zone		1	(2)	0	(0)	0	(0)	0	(0)
	red zone		0	(0)	1	(2)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	rough		4	(8)	3	(6)	0	(0)	0	(0)
	herniation		5	(10)	10	(20)	8	(16)	6	(12)
kidney	enlarged		0	(0)	1	(2)	0	(0)	0	(0)
	white zone		1	(2)	0	(0)	1	(2)	0	(0)
	granular		6	(12)	2	(4)	7	(14)	7	(14)
urin bladd	red zone		0	(0)	0	(0)	0	(0)	1	(2)
	dilated		0	(0)	0	(0)	0	(0)	1	(2)
	urine:marked retention		0	(0)	3	(6)	0	(0)	1	(2)
	urine:red		1	(2)	0	(0)	0	(0)	0	(0)
pituitary	enlarged		4	(8)	4	(8)	4	(8)	4	(8)
	red zone		4	(8)	1	(2)	1	(2)	2	(4)
	nodule		3	(6)	2	(4)	4	(8)	3	(6)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	80 ppm	200 ppm	500 ppm
			50 (%)	50 (%)	50 (%)	50 (%)
thyroid	enlarged		3 (6)	1 (2)	3 (6)	1 (2)
	nodule		1 (2)	0 (0)	1 (2)	2 (4)
adrenal	enlarged		1 (2)	2 (4)	3 (6)	0 (0)
testis	nodule		39 (78)	42 (84)	46 (92)	44 (88)
semin ves	nodule		1 (2)	0 (0)	0 (0)	0 (0)
prostate	red		1 (2)	0 (0)	0 (0)	0 (0)
brain	brown zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		0 (0)	1 (2)	0 (0)	0 (0)
	adhesion		0 (0)	1 (2)	0 (0)	0 (0)
periph nerv	nodule		0 (0)	1 (2)	0 (0)	0 (0)
eye	turbid		0 (0)	0 (0)	1 (2)	0 (0)
	white		5 (10)	6 (12)	1 (2)	1 (2)
Harder gl	enlarged		0 (0)	0 (0)	1 (2)	0 (0)
Zymbal gl	nodule		0 (0)	1 (2)	0 (0)	0 (0)
muscle	nodule		0 (0)	1 (2)	0 (0)	0 (0)
bone	nodule		1 (2)	0 (0)	0 (0)	2 (4)
peritoneum	nodule		1 (2)	3 (6)	1 (2)	4 (8)
retroperit	nodule		0 (0)	1 (2)	0 (0)	0 (0)
	mass		2 (4)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		0 (0)	0 (0)	0 (0)	2 (4)
	ascites		2 (4)	2 (4)	0 (0)	2 (4)
thoracic ca	pleural fluid		1 (2)	2 (4)	1 (2)	0 (0)

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
other	lower jaw:nodule		0	(0)	0	(0)	1	(2)	0	(0)
whole body	anemic		0	(0)	0	(0)	1	(2)	2	(4)

(HPT080)

BAIS 4

APPENDIX I 2

GROSS FINDINGS : MALE DEAD AND MORIBUND ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			10	(%)	11	(%)	9	(%)	14	(%)
skin/app	nodule		0	(0)	0	(0)	2	(22)	1	(7)
	scab		1	(10)	0	(0)	0	(0)	0	(0)
subcutis	jaundice		0	(0)	0	(0)	1	(11)	2	(14)
	mass		1	(10)	1	(9)	4	(44)	4	(29)
lung	white zone		2	(20)	2	(18)	1	(11)	0	(0)
	red zone		0	(0)	1	(9)	0	(0)	0	(0)
	edema		0	(0)	1	(9)	0	(0)	0	(0)
lymph node	enlarged		0	(0)	0	(0)	1	(11)	0	(0)
thymus	nodule		0	(0)	0	(0)	1	(11)	0	(0)
spleen	enlarged		5	(50)	1	(9)	4	(44)	6	(43)
	white zone		1	(10)	0	(0)	1	(11)	0	(0)
	red zone		0	(0)	0	(0)	0	(0)	1	(7)
	nodule		1	(10)	0	(0)	0	(0)	0	(0)
heart	hypertrophy		0	(0)	1	(9)	1	(11)	0	(0)
forestomach	nodule		1	(10)	0	(0)	0	(0)	0	(0)
	ulcer		0	(0)	0	(0)	1	(11)	1	(7)
	erosion		0	(0)	0	(0)	0	(0)	1	(7)
gl stomach	red zone		0	(0)	0	(0)	0	(0)	2	(14)
	black zone		0	(0)	0	(0)	1	(11)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(7)
	ulcer		0	(0)	1	(9)	0	(0)	0	(0)
liver	enlarged		2	(20)	0	(0)	1	(11)	1	(7)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	80 ppm 11 (%)	200 ppm 9 (%)	500 ppm 14 (%)
liver	white zone		1 (10)	0 (0)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	0 (0)	1 (7)
	herniation		1 (10)	2 (18)	1 (11)	2 (14)
kidney	enlarged		0 (0)	1 (9)	0 (0)	0 (0)
	white zone		1 (10)	0 (0)	1 (11)	0 (0)
	granular		0 (0)	0 (0)	1 (11)	0 (0)
urin bladd	red zone		0 (0)	0 (0)	0 (0)	1 (7)
	dilated		0 (0)	0 (0)	0 (0)	1 (7)
	urine:marked retention		0 (0)	3 (27)	0 (0)	1 (7)
	urine:red		1 (10)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		3 (30)	0 (0)	2 (22)	0 (0)
	red zone		1 (10)	0 (0)	0 (0)	2 (14)
thyroid	enlarged		2 (20)	1 (9)	1 (11)	0 (0)
adrenal	enlarged		0 (0)	1 (9)	2 (22)	0 (0)
testis	nodule		2 (20)	4 (36)	8 (89)	9 (64)
prostate	red		1 (10)	0 (0)	0 (0)	0 (0)
brain	brown zone		0 (0)	0 (0)	0 (0)	1 (7)
	nodule		0 (0)	1 (9)	0 (0)	0 (0)
	adhesion		0 (0)	1 (9)	0 (0)	0 (0)
periph nerv	nodule		0 (0)	1 (9)	0 (0)	0 (0)
eye	turbid		0 (0)	0 (0)	1 (11)	0 (0)
	white		0 (0)	0 (0)	1 (11)	0 (0)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			10	(%)	11	(%)	9	(%)	14	(%)
Harder gl	enlarged		0	(0)	0	(0)	1	(11)	0	(0)
Zymbal gl	nodule		0	(0)	1	(9)	0	(0)	0	(0)
muscle	nodule		0	(0)	1	(9)	0	(0)	0	(0)
bone	nodule		0	(0)	0	(0)	0	(0)	1	(7)
peritoneum	nodule		0	(0)	3	(27)	1	(11)	1	(7)
retroperit	nodule		0	(0)	1	(9)	0	(0)	0	(0)
	mass		1	(10)	0	(0)	0	(0)	0	(0)
abdominal c	hemorrhage		0	(0)	0	(0)	0	(0)	2	(14)
	ascites		0	(0)	2	(18)	0	(0)	1	(7)
thoracic ca	pleural fluid		0	(0)	2	(18)	1	(11)	0	(0)
whole body	anemic		0	(0)	0	(0)	1	(11)	2	(14)

APPENDIX I 3

GROSS FINDINGS : MALE SACRIFICED ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			40	(%)	39	(%)	41	(%)	36	(%)
skin/app	nodule		1	(3)	4	(10)	2	(5)	2	(6)
subcutis	mass		2	(5)	5	(13)	5	(12)	2	(6)
lung	white zone		1	(3)	3	(8)	3	(7)	3	(8)
	brown zone		0	(0)	0	(0)	0	(0)	1	(3)
	nodule		2	(5)	0	(0)	0	(0)	1	(3)
lymph node	enlarged		2	(5)	2	(5)	0	(0)	0	(0)
spleen	enlarged		3	(8)	3	(8)	0	(0)	1	(3)
	white zone		0	(0)	0	(0)	0	(0)	1	(3)
	nodule		1	(3)	0	(0)	0	(0)	0	(0)
	deformed		1	(3)	0	(0)	1	(2)	0	(0)
tongue	nodule		0	(0)	1	(3)	1	(2)	0	(0)
salivary gl	nodule		0	(0)	0	(0)	0	(0)	1	(3)
forestomach	nodule		1	(3)	0	(0)	1	(2)	0	(0)
small intes	nodule		0	(0)	0	(0)	1	(2)	1	(3)
cecum	nodule		0	(0)	0	(0)	1	(2)	0	(0)
liver	red zone		0	(0)	1	(3)	0	(0)	1	(3)
	rough		4	(10)	3	(8)	0	(0)	0	(0)
	herniation		4	(10)	8	(21)	7	(17)	4	(11)
kidney	granular		6	(15)	2	(5)	6	(15)	7	(19)
pituitary	enlarged		1	(3)	4	(10)	2	(5)	4	(11)
	red zone		3	(8)	1	(3)	1	(2)	0	(0)
	nodule		3	(8)	2	(5)	4	(10)	3	(8)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			40	(%)	39	(%)	41	(%)	36	(%)
thyroid	enlarged		1	(3)	0	(0)	2	(5)	1	(3)
	nodule		1	(3)	0	(0)	1	(2)	2	(6)
adrenal	enlarged		1	(3)	1	(3)	1	(2)	0	(0)
testis	nodule		37	(93)	38	(97)	38	(93)	35	(97)
semin ves	nodule		1	(3)	0	(0)	0	(0)	0	(0)
eye	white		5	(13)	6	(15)	0	(0)	1	(3)
bone	nodule		1	(3)	0	(0)	0	(0)	1	(3)
peritoneum	nodule		1	(3)	0	(0)	0	(0)	3	(8)
retroperit	mass		1	(3)	0	(0)	0	(0)	0	(0)
abdominal c	ascites		2	(5)	0	(0)	0	(0)	1	(3)
thoracic ca	pleural fluid		1	(3)	0	(0)	0	(0)	0	(0)
other	lower jaw:nodule		0	(0)	0	(0)	1	(2)	0	(0)

APPENDIX I 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		0	(0)	1	(2)	0	(0)	1	(2)
	scab		1	(2)	0	(0)	0	(0)	0	(0)
subcutis	jaundice		2	(4)	1	(2)	0	(0)	0	(0)
	mass		3	(6)	9	(18)	5	(10)	12	(24)
lung	red		0	(0)	0	(0)	1	(2)	0	(0)
	white zone		1	(2)	1	(2)	1	(2)	0	(0)
	red zone		1	(2)	1	(2)	0	(0)	2	(4)
	nodule		0	(0)	1	(2)	1	(2)	0	(0)
lymph node	enlarged		0	(0)	0	(0)	1	(2)	1	(2)
spleen	enlarged		8	(16)	7	(14)	4	(8)	4	(8)
	white zone		1	(2)	0	(0)	1	(2)	0	(0)
	black zone		0	(0)	0	(0)	1	(2)	1	(2)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
heart	white		0	(0)	0	(0)	1	(2)	0	(0)
	white zone		0	(0)	2	(4)	0	(0)	0	(0)
tongue	nodule		0	(0)	0	(0)	1	(2)	2	(4)
forestomach	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	ulcer		2	(4)	2	(4)	1	(2)	1	(2)
liver	pale		1	(2)	0	(0)	0	(0)	1	(2)
	white zone		0	(0)	0	(0)	3	(6)	1	(2)
	red zone		0	(0)	0	(0)	0	(0)	2	(4)
	nodule		0	(0)	0	(0)	0	(0)	1	(2)

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
liver	cyst		0	(0)	0	(0)	0	(0)	3	(6)
	rough		5	(10)	3	(6)	2	(4)	4	(8)
	herniation		6	(12)	9	(18)	8	(16)	9	(18)
pancreas	nodule		0	(0)	0	(0)	1	(2)	0	(0)
kidney	granular		2	(4)	1	(2)	1	(2)	0	(0)
urin bladd	urine:marked retention		0	(0)	1	(2)	1	(2)	1	(2)
pituitary	enlarged		4	(8)	8	(16)	7	(14)	3	(6)
	red zone		12	(24)	9	(18)	4	(8)	7	(14)
	nodule		7	(14)	5	(10)	6	(12)	7	(14)
	cyst		0	(0)	0	(0)	1	(2)	0	(0)
thyroid	enlarged		1	(2)	1	(2)	0	(0)	1	(2)
	nodule		0	(0)	1	(2)	1	(2)	2	(4)
adrenal	enlarged		1	(2)	0	(0)	1	(2)	1	(2)
ovary	enlarged		1	(2)	0	(0)	0	(0)	0	(0)
	cyst		1	(2)	2	(4)	1	(2)	3	(6)
uterus	nodule		6	(12)	13	(26)	5	(10)	6	(12)
	cyst		0	(0)	0	(0)	0	(0)	1	(2)
	fluid:red		1	(2)	0	(0)	0	(0)	0	(0)
	fluid:black		1	(2)	0	(0)	0	(0)	0	(0)
brain	hemorrhage		0	(0)	0	(0)	0	(0)	1	(2)
spinal cord	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	brown zone		0	(0)	1	(2)	0	(0)	0	(0)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
eye	turbid		0	(0)	0	(0)	0	(0)	1	(2)
	white		4	(8)	1	(2)	3	(6)	0	(0)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	2	(4)
muscle	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		1	(2)	0	(0)	0	(0)	0	(0)
pleura	nodule		0	(0)	0	(0)	1	(2)	0	(0)
mediastinum	mass		0	(0)	0	(0)	1	(2)	0	(0)
peritoneum	nodule		0	(0)	0	(0)	1	(2)	0	(0)
abdominal c	ascites		2	(4)	0	(0)	0	(0)	0	(0)
thoracic ca	hemorrhage		0	(0)	0	(0)	1	(2)	0	(0)
	pleural fluid		1	(2)	1	(2)	2	(4)	0	(0)
whole body	anemic		1	(2)	0	(0)	0	(0)	0	(0)

APPENDIX I 5

GROSS FINDINGS : FEMALE DEAD AND MORIBUND ANIMALS

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control	80 ppm	200 ppm	500 ppm
			13 (%)	9 (%)	12 (%)	18 (%)
subcutis	jaundice		2 (15)	1 (11)	0 (0)	0 (0)
	mass		0 (0)	2 (22)	1 (8)	4 (22)
lung	red		0 (0)	0 (0)	1 (8)	0 (0)
	red zone		1 (8)	1 (11)	0 (0)	2 (11)
lymph node	enlarged		0 (0)	0 (0)	1 (8)	0 (0)
spleen	enlarged		5 (38)	3 (33)	3 (25)	2 (11)
	white zone		0 (0)	0 (0)	1 (8)	0 (0)
	black zone		0 (0)	0 (0)	1 (8)	1 (6)
	nodule		0 (0)	0 (0)	1 (8)	0 (0)
heart	white		0 (0)	0 (0)	1 (8)	0 (0)
	white zone		0 (0)	1 (11)	0 (0)	0 (0)
forestomach	ulcer		2 (15)	2 (22)	1 (8)	1 (6)
liver	pale		1 (8)	0 (0)	0 (0)	1 (6)
	white zone		0 (0)	0 (0)	1 (8)	1 (6)
	rough		3 (23)	1 (11)	0 (0)	0 (0)
	herniation		0 (0)	1 (11)	2 (17)	2 (11)
pancreas	nodule		0 (0)	0 (0)	1 (8)	0 (0)
urin bladd	urine:marked retention		0 (0)	1 (11)	1 (8)	1 (6)
pituitary	enlarged		2 (15)	3 (33)	3 (25)	2 (11)
	red zone		5 (38)	1 (11)	0 (0)	3 (17)
	nodule		1 (8)	0 (0)	2 (17)	2 (11)
ovary	enlarged		1 (8)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control	80 ppm	200 ppm	500 ppm
			13 (%)	9 (%)	12 (%)	18 (%)
ovary	cyst		0 (0)	0 (0)	0 (0)	1 (6)
uterus	nodule		1 (8)	2 (22)	3 (25)	1 (6)
	fluid:red		1 (8)	0 (0)	0 (0)	0 (0)
	fluid:black		1 (8)	0 (0)	0 (0)	0 (0)
brain	hemorrhage		0 (0)	0 (0)	0 (0)	1 (6)
spinal cord	red zone		0 (0)	0 (0)	1 (8)	0 (0)
	brown zone		0 (0)	1 (11)	0 (0)	0 (0)
eye	turbid		0 (0)	0 (0)	0 (0)	1 (6)
	white		1 (8)	0 (0)	1 (8)	0 (0)
Zymbal gl	nodule		0 (0)	0 (0)	0 (0)	2 (11)
muscle	red zone		0 (0)	0 (0)	1 (8)	0 (0)
pleura	nodule		0 (0)	0 (0)	1 (8)	0 (0)
mediastinum	mass		0 (0)	0 (0)	1 (8)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	1 (8)	0 (0)
abdominal c	ascites		2 (15)	0 (0)	0 (0)	0 (0)
thoracic ca	hemorrhage		0 (0)	0 (0)	1 (8)	0 (0)
	pleural fluid		1 (8)	1 (11)	2 (17)	0 (0)
whole body	anemic		1 (8)	0 (0)	0 (0)	0 (0)

APPENDIX I 6

GROSS FINDINGS : FEMALE SACRIFICED ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	80 ppm	200 ppm	500 ppm
			37 (%)	41 (%)	38 (%)	32 (%)
skin/app	nodule		0 (0)	1 (2)	0 (0)	1 (3)
	scab		1 (3)	0 (0)	0 (0)	0 (0)
subcutis	mass		3 (8)	7 (17)	4 (11)	8 (25)
lung	white zone		1 (3)	1 (2)	1 (3)	0 (0)
	nodule		0 (0)	1 (2)	1 (3)	0 (0)
lymph node	enlarged		0 (0)	0 (0)	0 (0)	1 (3)
spleen	enlarged		3 (8)	4 (10)	1 (3)	2 (6)
	white zone		1 (3)	0 (0)	0 (0)	0 (0)
heart	white zone		0 (0)	1 (2)	0 (0)	0 (0)
tongue	nodule		0 (0)	0 (0)	1 (3)	2 (6)
forestomach	nodule		0 (0)	0 (0)	0 (0)	1 (3)
liver	white zone		0 (0)	0 (0)	2 (5)	0 (0)
	red zone		0 (0)	0 (0)	0 (0)	2 (6)
	nodule		0 (0)	0 (0)	0 (0)	1 (3)
	cyst		0 (0)	0 (0)	0 (0)	3 (9)
	rough		2 (5)	2 (5)	2 (5)	4 (13)
	herniation		6 (16)	8 (20)	6 (16)	7 (22)
kidney	granular		2 (5)	1 (2)	1 (3)	0 (0)
pituitary	enlarged		2 (5)	5 (12)	4 (11)	1 (3)
	red zone		7 (19)	8 (20)	4 (11)	4 (13)
	nodule		6 (16)	5 (12)	4 (11)	5 (16)
	cyst		0 (0)	0 (0)	1 (3)	0 (0)

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		80 ppm		200 ppm		500 ppm	
			37	(%)	41	(%)	38	(%)	32	(%)
thyroid	enlarged		1	(3)	1	(2)	0	(0)	1	(3)
	nodule		0	(0)	1	(2)	1	(3)	2	(6)
adrenal	enlarged		1	(3)	0	(0)	1	(3)	1	(3)
ovary	cyst		1	(3)	2	(5)	1	(3)	2	(6)
uterus	nodule		5	(14)	11	(27)	2	(5)	5	(16)
	cyst		0	(0)	0	(0)	0	(0)	1	(3)
eye	white		3	(8)	1	(2)	2	(5)	0	(0)
muscle	nodule		1	(3)	0	(0)	0	(0)	0	(0)

(HPT080)

BAIS 4

APPENDIX J 1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight		ADRENALS		TESTES		HEART		LUNGS		KIDNEYS	
Control	40	381±	28	0.077±	0.061	3.193±	1.411	1.229±	0.084	1.438±	0.141	2.709±	0.171
80 ppm	39	372±	44	0.079±	0.084	3.730±	1.553	1.232±	0.089	1.476±	0.225	2.753±	0.253
200 ppm	41	357±	31**	0.072±	0.046	3.589±	1.278	1.211±	0.096	1.379±	0.099	2.761±	0.310
500 ppm	36	339±	39**	0.065±	0.008	4.639±	1.865**	1.197±	0.102	1.365±	0.085*	2.706±	0.265

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	40	1.029±	0.506	11.016±	1.269	2.041±	0.050
80 ppm	39	1.625±	3.568	11.094±	2.037	2.017±	0.050
200 ppm	41	0.853±	0.219*	10.346±	1.156*	2.000±	0.063**
500 ppm	36	0.835±	0.373**	10.105±	1.530*	1.967±	0.041**

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

Test of Dunnett

(HCL040)

BAIS 4

APPENDIX J 2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight		ADRENALS		OVARIES		HEART		LUNGS		KIDNEYS	
Control	37	249±	35	0.107±	0.228	0.137±	0.064	0.884±	0.082	1.041±	0.138	1.789±	0.159
80 ppm	41	234±	19	0.069±	0.006	0.320±	1.231	0.868±	0.073	1.025±	0.143	1.729±	0.100
200 ppm	38	249±	21	0.077±	0.023	0.131±	0.028	0.885±	0.067	1.025±	0.047	1.767±	0.097
500 ppm	32	230±	35**	0.094±	0.115	0.181±	0.216	0.894±	0.085	1.046±	0.107	1.810±	0.159

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

Test of Dunnett

(HCL040)

BATS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	37	0.824±	1.255	6.717±	1.111	1.855±	0.055
80 ppm	41	0.734±	0.919	6.412±	0.893	1.824±	0.042*
200 ppm	38	0.540±	0.199	6.724±	0.603	1.828±	0.055*
500 ppm	32	0.787±	1.105	6.764±	1.190	1.789±	0.046**

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

Test of Dunnett

(HCL040)

BAIS 4

APPENDIX K 1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: %

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

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	40	381± 28	0.020± 0.016	0.838± 0.365	0.324± 0.029	0.379± 0.046	0.714± 0.069
80 ppm	39	372± 44	0.023± 0.035	0.999± 0.406	0.335± 0.037	0.404± 0.094	0.746± 0.070*
200 ppm	41	357± 31**	0.021± 0.017	1.001± 0.341	0.341± 0.036	0.388± 0.040	0.777± 0.099**
500 ppm	36	339± 39**	0.019± 0.004	1.358± 0.492**	0.357± 0.049**	0.408± 0.054**	0.808± 0.125**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	40	0.270± 0.136	2.896± 0.331	0.538± 0.040
80 ppm	39	0.476± 1.211	2.994± 0.532	0.549± 0.063
200 ppm	41	0.238± 0.055	2.903± 0.301	0.563± 0.046*
500 ppm	36	0.248± 0.125	2.982± 0.291	0.589± 0.080**

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

Test of Dunnett

(HCL042)

BAIS 4

APPENDIX K 2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	37	249± 35	0.043± 0.089	0.055± 0.024	0.359± 0.037	0.423± 0.065	0.729± 0.092
80 ppm	41	234± 19	0.030± 0.003	0.150± 0.608	0.373± 0.043	0.441± 0.089	0.741± 0.061
200 ppm	38	249± 21	0.031± 0.010	0.053± 0.012	0.357± 0.031	0.414± 0.039	0.714± 0.066
500 ppm	32	230± 35**	0.043± 0.058**	0.083± 0.109*	0.394± 0.043**	0.463± 0.075**	0.799± 0.107**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	37	0.333± 0.520	2.715± 0.401	0.759± 0.099
80 ppm	41	0.328± 0.482	2.743± 0.380	0.783± 0.064
200 ppm	38	0.217± 0.074	2.710± 0.249	0.740± 0.076
500 ppm	32	0.356± 0.546	2.958± 0.415**	0.793± 0.099

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

Test of Dunnett

(HCL042)

BAIS 4

APPENDIX L 1

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
ALL ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Integumentary system/appandage}																		
subcutis			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
 {Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	adhesion		0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	congestion		2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)
	thrombus		3	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
			(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	squamous cell hyperplasia		0	0	0	0	2	0	0	0	6	0	0	0 *	23	4	0	0 **
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(46)	(8)	(0)	(0)
	hyperplasia:gland		0	0	0	0	44	2	0	0 **	8	37	5	0 **	3	19	27	0 **
			(0)	(0)	(0)	(0)	(88)	(4)	(0)	(0)	(16)	(74)	(10)	(0)	(6)	(38)	(54)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm					
		No. of Animals on Study	50				50				50				50					
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
{Respiratory system}																				
nasal cavit																				
	goblet cell hyperplasia		<50>				<50>				<50>				<50>					
			0	0	0	0	15	0	0	0	0 **	39	2	0	0	0 **	37	7	1	0 **
			(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(78)	(4)	(0)	(0)	(74)	(14)	(2)	(0)	
	eosinophilic change:olfactory epithelium		40	6	0	0	0	0	0	0	0 **	0	0	0	0	0 **	0	0	0	0 **
			(80)	(12)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	eosinophilic change:respiratory epithelium		36	0	0	0	0	0	0	0	0 **	1	0	0	0	0 **	1	0	0	0 **
			(72)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	inflammation:foreign body		10	7	0	0	11	6	0	0		9	8	0	0		5	11	0	0
			(20)	(14)	(0)	(0)	(22)	(12)	(0)	(0)		(18)	(16)	(0)	(0)		(10)	(22)	(0)	(0)
	inflammation:respiratory epithelium		20	0	0	0	35	0	0	0	0 **	46	1	0	0	0 **	37	10	0	0 **
			(40)	(0)	(0)	(0)	(70)	(0)	(0)	(0)	(0)	(92)	(2)	(0)	(0)	(0)	(74)	(20)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		21	0	0	0	49	1	0	0	0 **	50	0	0	0	0 **	2	42	5	0 **
			(42)	(0)	(0)	(0)	(98)	(2)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(4)	(84)	(10)	(0)
	respiratory metaplasia:gland		49	0	0	0	50	0	0	0		50	0	0	0		49	1	0	0
			(98)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(98)	(2)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		5	0	0	0	30	1	0	0	0 **	40	1	0	0	0 **	37	12	0	0 **
			(10)	(0)	(0)	(0)	(60)	(2)	(0)	(0)	(0)	(80)	(2)	(0)	(0)	(0)	(74)	(24)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	hyperplasia:transitional epithelium		0	0	0	0	27	4	0	0 **	36	3	0	0 **	20	17	11	0 **
			(0)	(0)	(0)	(0)	(54)	(8)	(0)	(0)	(72)	(6)	(0)	(0)	(40)	(34)	(22)	(0)
	sclerosis:lamina propria		0	0	0	0	2	0	0	0	9	0	0	0 **	15	0	0	0 **
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	41	7	0	0 **	4	46	0	0 **	0	49	0	0 **
			(0)	(0)	(0)	(0)	(82)	(14)	(0)	(0)	(8)	(92)	(0)	(0)	(0)	(98)	(0)	(0)
	thickening of bone		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
lung			<50>				<50>				<50>				<50>			
	congestion		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(2)	(0)	(0)
	edema		3	0	0	0	1	0	0	0	2	0	0	0	5	0	0	0
			(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<50>			
	fibrosis:focal		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells		2	0	0	0	6	0	0	0	6	0	0	0	7	0	0	0
			(4)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		4	0	0	0	4	1	0	0	1	0	1	0	2	0	0	0
			(8)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(2)	(0)	(2)	(0)	(4)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	congestion		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	increased hematopoiesis		4	0	0	0	3	0	0	0	4	0	0	0	6	0	0	0
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
lymph node			<50>				<50>				<50>				<50>			
	hemorrhage		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphadenitis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<50>				<50>				<50>				<50>			
	congestion		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	deposit of hemosiderin		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	fibrosis:focal		1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	
			(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	extramedullary hematopoiesis		2	1	0	0	2	4	0	0	5	2	0	0	5	4	0	0
			(4)	(2)	(0)	(0)	(4)	(8)	(0)	(0)	(10)	(4)	(0)	(0)	(10)	(8)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<50>				<50>				<50>				<50>			
	focal fatty change		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	myocardial fibrosis		10	0	0	0	12	0	0	0	10	0	0	0	9	1	0	0
			(20)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(18)	(2)	(0)	(0)
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
artery/aort			<50>				<50>				<50>				<50>			
	arteritis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
oral cavity																		
	squamous cell hyperplasia		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
salivary gl																		
	mineralization		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach																		
	cyst		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:forestomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		0	0	1	0	0	0	0	0	0	3	0	0	1	1	0	0
			(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(2)	(2)	(0)	(0)
	hyperplasia:forestomach		5	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	erosion:glandular stomach		5	0	0	0	8	0	0	0	4	2	0	0	4	2	0	0
			(10)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(8)	(4)	(0)	(0)	(8)	(4)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
stomach		<50>				<50>				<50>				<50>			
	ulcer:glandular stomach	3 (6)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)
	heterotopic gland	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
small intes		<50>				<50>				<50>				<50>			
	cyst	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
liver		<50>				<50>				<50>				<50>			
	herniation	6 (12)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)	9 (18)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)
	angiectasis	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	necrosis:central	0 (0)	0 (0)	0 (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 (0)
	necrosis:focal	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
		<50>				<50>				<50>				<50>			

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Digestive system}																		
liver																		
	fatty change:central		<50>				<50>				<50>				<50>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change:peripheral		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		6	1	0	0	4	0	0	0	2	0	0	0	6	0	0	0
			(12)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	clear cell focus		1	1	0	0	0	0	0	0	0	1	0	0	2	0	0	0
			(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)
	acidophilic cell focus		5	2	0	0	7	1	0	0	6	2	0	0	4	2	0	0
			(10)	(4)	(0)	(0)	(14)	(2)	(0)	(0)	(12)	(4)	(0)	(0)	(8)	(4)	(0)	(0)
	basophilic cell focus		8	0	0	0	8	0	0	0	10	1	0	0	10	1	1	0
			(16)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(20)	(2)	(0)	(0)	(20)	(2)	(2)	(0)
	spongiosis hepatitis		3	0	0	0	3	0	0	0	7	0	0	0	4	1	0	0
			(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(8)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
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STUDY NO. : 0457
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 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver	bile duct hyperplasia		49 (98)	0 (0)	0 (0)	0 (0)	48 (96)	0 (0)	0 (0)	0 (0)	45 (90)	0 (0)	0 (0)	0 (0)	42 (84)	0 (0)	0 (0)	0 * (0)
	cholangiofibrosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	focal fatty change		1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
pancreas	atrophy		24 (48)	3 (6)	0 (0)	0 (0)	22 (44)	1 (2)	0 (0)	0 (0)	21 (42)	2 (4)	0 (0)	0 (0)	19 (38)	0 (0)	0 (0)	0 (0)
	lymphocytic infiltration		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	islet cell hyperplasia		4 (8)	2 (4)	0 (0)	0 (0)	2 (4)	0 (0)	1 (2)	0 (0)	3 (6)	0 (0)	1 (2)	0 (0)	2 (4)	1 (2)	0 (0)	0 (0)
	hyperplasia:acinar cell		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
{Urinary system}																		
kidney	hyperplasia:tubular epithelial cell		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 11

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney																		
			<50>				<50>				<50>				<50>			
	cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scar		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		24	20	4	0	27	16	1	0	27	15	7	0	26	11	7	0
			(48)	(40)	(8)	(0)	(54)	(32)	(2)	(0)	(54)	(30)	(14)	(0)	(52)	(22)	(14)	(0)
	hydronephrosis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:papilla		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	urothelial hyperplasia:pelvis		0	1	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)	(2)	(0)	(0)	(0)
	arthritis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd	dilatation		<50>				<50>				<50>				<50>			
			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Endocrine system}																		
pituitary	inflammation		<50>				<50>				<50>				<50>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	angiectasis		<50>				<50>				<50>				<50>			
			0	1	0	0	2	0	0	0	2	1	0	0	2	0	0	0
			(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(4)	(0)	(0)	(0)
	cyst		1	0	0	0	2	0	0	0	4	0	0	0	3	0	0	0
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	deposit of hemosiderin		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 13

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary	hyperplasia		<50>				<50>				<50>				<50>			
		6	5	1	0	8	3	1	0	3	8	3	0	7	1	1	0	
		(12)	(10)	(2)	(0)	(16)	(6)	(2)	(0)	(6)	(16)	(6)	(0)	(14)	(2)	(2)	(0)	
Rathke pouch	4	0	0	0	2	0	0	0	5	0	0	0	3	0	0	0		
	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(6)	(0)	(0)	(0)		
thyroid	ultimibranhial body remanet		<50>				<50>				<50>				<50>			
		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
follicular hyperplasia	0	0	0	0	3	0	0	0	1	1	0	0	2	0	0	0		
	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)		
C-cell hyperplasia	14	4	1	0	15	2	0	0	9	4	1	0	6	2	0	0		
	(28)	(8)	(2)	(0)	(30)	(4)	(0)	(0)	(18)	(8)	(2)	(0)	(12)	(4)	(0)	(0)		
cystic thyroid follicle	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		
parathyroid	hyperplasia		<49>				<50>				<49>				<46>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal	hemorrhage		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia:cortical cell		3	1	0	0	1	1	0	0	0	0	0	0	3	1	0	0
			(6)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(2)	(0)	(0)
	hyperplasia:medulla		2	0	3	0	2	0	1	0	1	1	1	0	1	0	1	0
			(4)	(0)	(6)	(0)	(4)	(0)	(2)	(0)	(2)	(2)	(2)	(0)	(2)	(0)	(2)	(0)
	focal fatty change:cortex		1	2	0	0	2	0	0	0	3	2	0	0	2	0	0	0
			(2)	(4)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(4)	(0)	(0)	(4)	(0)	(0)	(0)
{Reproductive system}																		
testis	mineralization		<50>				<50>				<50>				<50>			
			4	0	0	0	3	0	0	0	3	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis	arteritis		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	interstitial cell hyperplasia		6	0	0	0	6	0	0	0	9	1	0	0	6	0	0	0
			(12)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(18)	(2)	(0)	(0)	(12)	(0)	(0)	(0)
semin ves	cyst		<50>				<50>				<50>				<50>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prostate	hemorrhage		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation		10	1	0	0	8	1	0	0	6	0	0	0	8	0	0	0
			(20)	(2)	(0)	(0)	(16)	(2)	(0)	(0)	(12)	(0)	(0)	(0)	(16)	(0)	(0)	(0)
	hyperplasia		7	3	0	0	9	2	0	0	9	2	0	0	5	1	0	0
			(14)	(6)	(0)	(0)	(18)	(4)	(0)	(0)	(18)	(4)	(0)	(0)	(10)	(2)	(0)	(0)
mammary gl	hyperplasia		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 16

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																	
mammary gl		<50>				<50>				<50>				<50>			
	galactoceles	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
{Nervous system}																	
brain		<50>				<50>				<50>				<50>			
	necrosis:focal	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Special sense organs/appendage}																	
eye		<50>				<50>				<50>				<50>			
	hemorrhage	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory infiltration	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	cataract	4 (8)	1 (2)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	1 (2)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 17

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	retinal atrophy		0	0	5	0	1	0	7	0	0	1	1	0	0	0	1	0
			(0)	(0)	(10)	(0)	(2)	(0)	(14)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)
	keratitis		2	1	0	0	4	0	0	0	5	0	0	0	2	0	0	0
			(4)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
Harder gl			<50>				<50>				<50>				<50>			
	degeneration:focal		3	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0
			(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	granulation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
bone			<50>				<50>				<50>				<50>			
	osteosclerosis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

APPENDIX L 2

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		10				11				9				14			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																	
subcutis		<10>				<11>				< 9>				<14>			
	inflammation	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																	
nasal cavit		<10>				<11>				< 9>				<14>			
	adhesion	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	hemorrhage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)
	thrombus	3	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
		(30)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
	squamous cell hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	6	1	0	0 *
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(43)	(7)	(0)	(0)
	hyperplasia:gland	0	0	0	0	8	0	0	0 **	1	8	0	0 **	3	5	5	0 **
		(0)	(0)	(0)	(0)	(73)	(0)	(0)	(0)	(11)	(89)	(0)	(0)	(21)	(36)	(36)	(0)
	goblet cell hyperplasia	0	0	0	0	3	0	0	0	7	0	0	0 **	9	1	1	0 **
		(0)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(78)	(0)	(0)	(0)	(64)	(7)	(7)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	10				11				9				14			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<10>				<11>				< 9>				<14>			
	eosinophilic change:olfactory epithelium		7 (70)	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)
	eosinophilic change:respiratory epithelium		4 (40)	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)
	inflammation:foreign body		2 (20)	2 (20)	0 (0)	0 (0)	0 (0)	1 (9)	0 (0)	0 (0)	3 (33)	3 (33)	0 (0)	0 (0)	3 (21)	2 (14)	0 (0)	0 (0)
	inflammation:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	3 (27)	0 (0)	0 (0)	0 (0)	7 (78)	0 (0)	0 (0)	0 ** (0)	10 (71)	1 (7)	0 (0)	0 ** (0)
	respiratory metaplasia:olfactory epithelium		3 (30)	0 (0)	0 (0)	0 (0)	10 (91)	1 (9)	0 (0)	0 ** (0)	9 (100)	0 (0)	0 (0)	0 ** (0)	1 (7)	11 (79)	1 (7)	0 ** (0)
	respiratory metaplasia:gland		8 (80)	0 (0)	0 (0)	0 (0)	11 (100)	0 (0)	0 (0)	0 (0)	9 (100)	0 (0)	0 (0)	0 (0)	14 (100)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	6 (55)	0 (0)	0 (0)	0 * (0)	6 (67)	0 (0)	0 (0)	0 ** (0)	9 (64)	5 (36)	0 (0)	0 ** (0)
	hyperplasia:transitional epithelium		0 (0)	0 (0)	0 (0)	0 (0)	8 (73)	2 (18)	0 (0)	0 ** (0)	6 (67)	2 (22)	0 (0)	0 ** (0)	4 (29)	7 (50)	2 (14)	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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		10				11				9				14			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit																	
	sclerosis:lamina propria	<10>				<11>				< 9>				<14>			
		0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(36)	(0)	(0)	(0)
	atrophy:olfactory epithelium	0	0	0	0	6	3	0	0 **	2	7	0	0 **	0	13	0	0 **
		(0)	(0)	(0)	(0)	(55)	(27)	(0)	(0)	(22)	(78)	(0)	(0)	(0)	(93)	(0)	(0)
lung																	
	congestion	<10>				<11>				< 9>				<14>			
		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0
		(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(7)	(0)	(0)
	edema	3	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0
		(30)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
	accumulation of foamy cells	1	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0
		(10)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(10)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																	
bone marrow																	
	congestion	<10>				<11>				< 9>				<14>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study				11				9				14			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																	
bone marrow		<10>				<11>				< 9>				<14>			
	lymphocytic infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	increased hematopoiesis	2	0	0	0	3	0	0	0	2	0	0	0	4	0	0	0
		(20)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
spleen		<10>				<11>				< 9>				<14>			
	deposit of hemosiderin	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	extramedullary hematopoiesis	0	1	0	0	0	4	0	0	1	2	0	0	2	3	0	0
		(0)	(10)	(0)	(0)	(0)	(36)	(0)	(0)	(11)	(22)	(0)	(0)	(14)	(21)	(0)	(0)
{Circulatory system}																	
heart		<10>				<11>				< 9>				<14>			
	thrombus	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			10				11				9				14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart	inflammatory infiltration		<10>				<11>				< 9>				<14>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	myocardial fibrosis		5	0	0	0	5	0	0	0	1	0	0	0	3	1	0	0
			(50)	(0)	(0)	(0)	(45)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(21)	(7)	(0)	(0)
artery/aort	arteritis		<10>				<11>				< 9>				<14>			
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)
{Digestive system}																		
stomach	erosion:forestomach		<10>				<11>				< 9>				<14>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		0	0	1	0	0	0	0	0	0	3	0	0	1	1	0	0
			(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)	(7)	(7)	(0)	(0)
	hyperplasia:forestomach		3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(30)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 6

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		10				11				9				14			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
stomach																	
	erosion:glandular stomach	<10>				<11>				< 9>				<14>			
		1	0	0	0	3	0	0	0	2	2	0	0	2	2	0	0
		(10)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(22)	(22)	(0)	(0)	(14)	(14)	(0)	(0)
	ulcer:glandular stomach	2	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0
		(20)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(0)
liver																	
	herniation	<10>				<11>				< 9>				<14>			
		2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(20)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	angiectasis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:central	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	necrosis:focal	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change:central	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change:peripheral	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	10				11				9				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<10>				<11>				< 9>				<14>			
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spongiosis hepatitis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bile duct hyperplasia		9	0	0	0	9	0	0	0	5	0	0	0	7	0	0	0
			(90)	(0)	(0)	(0)	(82)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(50)	(0)	(0)	(0)
pancreas			<10>				<11>				< 9>				<14>			
	atrophy		2	0	0	0	3	0	0	0	3	1	0	0	5	0	0	0
			(20)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(33)	(11)	(0)	(0)	(36)	(0)	(0)	(0)
	islet cell hyperplasia		0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0
			(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<10>				<11>				< 9>				<14>			
	scar		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study				11				9				14			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																	
kidney		<10>				<11>				< 9>				<14>			
	chronic nephropathy	4	3	1	0	4	1	0	0	5	2	1	0	8	1	0	0
		(40)	(30)	(10)	(0)	(36)	(9)	(0)	(0)	(56)	(22)	(11)	(0)	(57)	(7)	(0)	(0)
	hydronephrosis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	urothelial hyperplasia:pelvis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
urin bladd		<10>				<11>				< 9>				<14>			
	dilatation	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
		(10)	(0)	(0)	(0)	(9)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
urethra		<10>				<11>				< 9>				<14>			
	inflammation	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	10				11				9				14			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
{Endocrine system}																		
pituitary			<10>				<11>				< 9>				<14>			
	angiectasis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	Rathke pouch		2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<10>				<11>				< 9>				<14>			
	ultimibranhial body remanet		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	follicular hyperplasia		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
	C-cell hyperplasia		2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
parathyroid			< 9>				<11>				< 8>				<12>			
	hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 10				80 ppm 11				200 ppm 9				500 ppm 14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<10>				<11>				< 9>				<14>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	hyperplasia:cortical cell		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:medulla		0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex		0	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(20)	(0)	(0)	(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
testis			<10>				<11>				< 9>				<14>			
	mineralization		1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 11

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	10				11				9				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis			<10>				<11>				< 9>				<14>			
	interstitial cell hyperplasia		2	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0
			(20)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
prostate			<10>				<11>				< 9>				<14>			
	hemorrhage		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation		3	1	0	0	0	1	0	0	2	0	0	0	1	0	0	0
			(30)	(10)	(0)	(0)	(0)	(9)	(0)	(0)	(22)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	hyperplasia		1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
mammary gl			<10>				<11>				< 9>				<14>			
	galactoceles		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<10>				<11>				< 9>				<14>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			10				11				9				14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye																		
	cataract		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(11)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)
	keratitis		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl																		
	degeneration:focal		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle																		
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
bone																		
	osteosclerosis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)

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

APPENDIX L 3

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
SACRIFICED ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		40				39				41				36			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<40>				<39>				<41>				<36>			
	adhesion	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	congestion	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell hyperplasia	0	0	0	0	1	0	0	0	5	0	0	0	17	3	0	0 **
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(47)	(8)	(0)	(0)
	hyperplasia:gland	0	0	0	0	36	2	0	0 **	7	29	5	0 **	0	14	22	0 **
		(0)	(0)	(0)	(0)	(92)	(5)	(0)	(0)	(17)	(71)	(12)	(0)	(0)	(39)	(61)	(0)
	goblet cell hyperplasia	0	0	0	0	12	0	0	0 **	32	2	0	0 **	28	6	0	0 **
		(0)	(0)	(0)	(0)	(31)	(0)	(0)	(0)	(78)	(5)	(0)	(0)	(78)	(17)	(0)	(0)
	eosinophilic change:olfactory epithelium	33	6	0	0	0	0	0	0 **	0	0	0	0 **	0	0	0	0 **
		(83)	(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium	32	0	0	0	0	0	0	0 **	1	0	0	0 **	1	0	0	0 **
		(80)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	inflammation:foreign body	8	5	0	0	11	5	0	0	6	5	0	0	2	9	0	0
		(20)	(13)	(0)	(0)	(28)	(13)	(0)	(0)	(15)	(12)	(0)	(0)	(6)	(25)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit																		
			<40>				<39>				<41>				<36>			
inflammation:respiratory epithelium			20	0	0	0	32	0	0	0	39	1	0	0	27	9	0	0
			(50)	(0)	(0)	(0)	(82)	(0)	(0)	(0)	(95)	(2)	(0)	(0)	(75)	(25)	(0)	(0)
respiratory metaplasia:olfactory epithelium			18	0	0	0	39	0	0	0	41	0	0	0	1	31	4	0
			(45)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(3)	(86)	(11)	(0)
respiratory metaplasia:gland			41	0	0	0	39	0	0	0	41	0	0	0	35	1	0	0
			(103)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(97)	(3)	(0)	(0)
squamous cell metaplasia:respiratory epithelium			5	0	0	0	24	1	0	0	34	1	0	0	28	7	0	0
			(13)	(0)	(0)	(0)	(62)	(3)	(0)	(0)	(83)	(2)	(0)	(0)	(78)	(19)	(0)	(0)
hyperplasia:transitional epithelium			0	0	0	0	19	2	0	0	30	1	0	0	16	10	9	0
			(0)	(0)	(0)	(0)	(49)	(5)	(0)	(0)	(73)	(2)	(0)	(0)	(44)	(28)	(25)	(0)
sclerosis:lamina propria			0	0	0	0	2	0	0	0	7	0	0	0	10	0	0	0
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(28)	(0)	(0)	(0)
atrophy:olfactory epithelium			0	0	0	0	35	4	0	0	2	39	0	0	0	36	0	0
			(0)	(0)	(0)	(0)	(90)	(10)	(0)	(0)	(5)	(95)	(0)	(0)	(0)	(100)	(0)	(0)
thickening of bone			0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<40>				<39>				<41>				<36>			
	epithelial hyperplasia:peri-submucosal gland		0	0	0	0	36	1	0	0 **	29	12	0	0 **	22	13	0	0 **
			(0)	(0)	(0)	(0)	(92)	(3)	(0)	(0)	(71)	(29)	(0)	(0)	(61)	(36)	(0)	(0)
lung			<40>				<39>				<41>				<36>			
	edema		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	fibrosis:focal		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells		1	0	0	0	4	0	0	0	5	0	0	0	5	0	0	0
			(3)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		3	0	0	0	3	1	0	0	1	0	1	0	2	0	0	0
			(8)	(0)	(0)	(0)	(8)	(3)	(0)	(0)	(2)	(0)	(2)	(0)	(6)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<40>				<39>				<41>				<36>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<40>				<39>				<41>				<36>			
	granulation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	increased hematopoiesis		2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
lymph node			<40>				<39>				<41>				<36>			
	hemorrhage		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphadenitis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<40>				<39>				<41>				<36>			
	congestion		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis:focal		1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(3)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 5

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<40>				<39>				<41>				<36>			
	extramedullary hematopoiesis		2	0	0	0	2	0	0	0	4	0	0	0	3	1	0	0
			(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(3)	(0)	(0)
	focal fatty change		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																		
heart			<40>				<39>				<41>				<36>			
	necrosis:focal		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		5	0	0	0	7	0	0	0	9	0	0	0	6	0	0	0
			(13)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(17)	(0)	(0)	(0)
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
artery/aort			<40>				<39>				<41>				<36>			
	arteritis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		40				39				41				36			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
oral cavity		<40>				<39>				<41>				<36>			
	squamous cell hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)
salivary gl		<40>				<39>				<41>				<36>			
	mineralization	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach		<40>				<39>				<41>				<36>			
	cyst	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	erosion:glandular stomach	4	0	0	0	5	0	0	0	2	0	0	0	2	0	0	0
		(10)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	ulcer:glandular stomach	1	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	heterotopic gland	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
small intes			<40>				<39>				<41>				<36>			
	cyst		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<40>				<39>				<41>				<36>			
	herniation		4	0	0	0	8	0	0	0	7	0	0	0	4	0	0	0
			(10)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	angiectasis		2	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0
			(5)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		6	1	0	0	4	0	0	0	2	0	0	0	6	0	0	0
			(15)	(3)	(0)	(0)	(10)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(17)	(0)	(0)	(0)
	clear cell focus		1	1	0	0	0	0	0	0	0	1	0	0	2	0	0	0
		(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	
	acidophilic cell focus		5	2	0	0	7	1	0	0	6	2	0	0	4	2	0	0
			(13)	(5)	(0)	(0)	(18)	(3)	(0)	(0)	(15)	(5)	(0)	(0)	(11)	(6)	(0)	(0)
	basophilic cell focus		7	0	0	0	8	0	0	0	9	1	0	0	10	1	1	0
			(18)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(22)	(2)	(0)	(0)	(28)	(3)	(3)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		40				39				41				36			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<40>				<39>				<41>				<36>			
	spongiosis hepatitis	3	0	0	0	2	0	0	0	7	0	0	0	4	1	0	0
		(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(11)	(3)	(0)	(0)
	bile duct hyperplasia	40	0	0	0	39	0	0	0	40	0	0	0	35	0	0	0
		(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(98)	(0)	(0)	(0)	(97)	(0)	(0)	(0)
	cholangiofibrosis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0
		(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
pancreas		<40>				<39>				<41>				<36>			
	atrophy	22	3	0	0	19	1	0	0	18	1	0	0	14	0	0	0
		(55)	(8)	(0)	(0)	(49)	(3)	(0)	(0)	(44)	(2)	(0)	(0)	(39)	(0)	(0)	(0)
	lymphocytic infiltration	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	islet cell hyperplasia	4	1	0	0	2	0	1	0	0	0	1	0	2	1	0	0
		(10)	(3)	(0)	(0)	(5)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(6)	(3)	(0)	(0)
	hyperplasia:acinar cell	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<40>				<39>				<41>				<36>			
	hyperplasia:tubular epithelial cell		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		20	17	3	0	23	15	1	0	22	13	6	0	18	10	7	0
		(50)	(43)	(8)	(0)	(59)	(38)	(3)	(0)	(54)	(32)	(15)	(0)	(50)	(28)	(19)	(0)	
	mineralization:papilla		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	urothelial hyperplasia:pelvis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arthritis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<40>				<39>				<41>				<36>			
	angiectasis		0	1	0	0	2	0	0	0	2	1	0	0	1	0	0	0
		(0)	(3)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(2)	(0)	(0)	(3)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<40>				<39>				<41>				<36>			
	cyst		1	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
			(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	deposit of hemosiderin		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		5	5	1	0	7	3	1	0	3	8	3	0	6	1	1	0
			(13)	(13)	(3)	(0)	(18)	(8)	(3)	(0)	(7)	(20)	(7)	(0)	(17)	(3)	(3)	(0)
	Rathke pouch		2	0	0	0	1	0	0	0	4	0	0	0	3	0	0	0
			(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
thyroid			<40>				<39>				<41>				<36>			
	ultimibranchial body remanet		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	follicular hyperplasia		0	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	C-cell hyperplasia		12	4	1	0	15	2	0	0	8	4	1	0	4	2	0	0
			(30)	(10)	(3)	(0)	(38)	(5)	(0)	(0)	(20)	(10)	(2)	(0)	(11)	(6)	(0)	(0)
	cystic thyroid follicle		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 11

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<40>				<39>				<41>				<36>			
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	hyperplasia:cortical cell		2	1	0	0	1	1	0	0	0	0	0	0	3	1	0	0
			(5)	(3)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(3)	(0)	(0)
	hyperplasia:medulla		2	0	3	0	1	0	1	0	1	0	1	0	1	0	1	0
			(5)	(0)	(8)	(0)	(3)	(0)	(3)	(0)	(2)	(0)	(2)	(0)	(3)	(0)	(3)	(0)
	focal fatty change:cortex		1	0	0	0	1	0	0	0	2	2	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(5)	(0)	(0)	(6)	(0)	(0)	(0)
{Reproductive system}																		
testis			<40>				<39>				<41>				<36>			
	mineralization		3	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	arteritis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	interstitial cell hyperplasia		4	0	0	0	5	0	0	0	8	1	0	0	2	0	0	0
			(10)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(20)	(2)	(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 ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 12

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
semin ves			<40>				<39>				<41>				<36>			
	cyst		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prostate			<40>				<39>				<41>				<36>			
	inflammation		7	0	0	0	8	0	0	0	4	0	0	0	7	0	0	0
			(18)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(19)	(0)	(0)	(0)
	hyperplasia		6	3	0	0	6	2	0	0	9	2	0	0	4	1	0	0
			(15)	(8)	(0)	(0)	(15)	(5)	(0)	(0)	(22)	(5)	(0)	(0)	(11)	(3)	(0)	(0)
mammary gl			<40>				<39>				<41>				<36>			
	hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	galactoceles		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Nervous system}																		
brain			<40>				<39>				<41>				<36>			
	necrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 13

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	40				39				41				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Special sense organs/appendage}																		
eye			<40>				<39>				<41>				<36>			
	hemorrhage		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cataract		4	1	0	0	7	0	0	0	0	0	0	0	1	0	0	0
			(10)	(3)	(0)	(0)	(18)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	retinal atrophy		0	0	5	0	1	0	7	0	0	1	0	0 *	0	0	1	0
			(0)	(0)	(13)	(0)	(3)	(0)	(18)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(3)	(0)
	keratitis		2	1	0	0	3	0	0	0	4	0	0	0	2	0	0	0
			(5)	(3)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
Harder gl			<40>				<39>				<41>				<36>			
	degeneration:focal		3	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	granulation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

APPENDIX L 4

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
ALL ANIMALS

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 18

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit																		
			<50>				<50>				<50>				<50>			
	adhesion		0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	thrombus		2	0	0	0	3	0	0	0	2	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	squamous cell hyperplasia		0	0	0	0	0	0	0	0	3	0	0	0	15	5	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(30)	(10)	(0)	(0)
	hyperplasia:gland		0	0	0	0	41	1	0	0 **	7	41	2	0 **	4	31	15	0 **
			(0)	(0)	(0)	(0)	(82)	(2)	(0)	(0)	(14)	(82)	(4)	(0)	(8)	(62)	(30)	(0)
	goblet cell hyperplasia		0	0	0	0	0	0	0	0	15	0	0	0 **	41	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(82)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		7	42	0	0	1	0	0	0 **	1	0	0	0 **	0	0	0	0 **
			(14)	(84)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium		41	0	0	0	12	0	0	0 **	5	0	0	0 **	2	0	0	0 **
			(82)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	inflammation:foreign body		2	0	0	0	6	1	0	0	7	0	0	0	4	1	0	0
			(4)	(0)	(0)	(0)	(12)	(2)	(0)	(0)	(14)	(0)	(0)	(0)	(8)	(2)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Respiratory system}																		
nasal cavit																		
			<50>				<50>				<50>				<50>			
	inflammation:respiratory epithelium		10	0	0	0	29	1	0	0 **	38	1	0	0 **	35	5	0	0 **
			(20)	(0)	(0)	(0)	(58)	(2)	(0)	(0)	(76)	(2)	(0)	(0)	(70)	(10)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		0	0	0	0	49	0	0	0 **	18	32	0	0 **	1	48	1	0 **
			(0)	(0)	(0)	(0)	(98)	(0)	(0)	(0)	(36)	(64)	(0)	(0)	(2)	(96)	(2)	(0)
	respiratory metaplasia:gland		45	0	0	0	49	0	0	0	50	0	0	0	50	0	0	0
			(90)	(0)	(0)	(0)	(98)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		3	0	0	0	15	0	0	0 **	31	6	0	0 **	25	21	0	0 **
			(6)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(62)	(12)	(0)	(0)	(50)	(42)	(0)	(0)
	hyperplasia:transitional epithelium		2	0	0	0	17	3	1	0 **	35	4	0	0 **	31	10	7	0 **
			(4)	(0)	(0)	(0)	(34)	(6)	(2)	(0)	(70)	(8)	(0)	(0)	(62)	(20)	(14)	(0)
	sclerosis:lamina propria		0	0	0	0	8	0	0	0 **	12	0	0	0 **	24	0	0	0 **
			(0)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(48)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	50	0	0	0 **	3	47	0	0 **	2	48	0	0 **
			(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(6)	(94)	(0)	(0)	(4)	(96)	(0)	(0)
	thickening of bone		0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				80 ppm 50				200 ppm 50				500 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<50>			
	congestion		0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	edema		5	0	0	0	2	0	0	0	1	0	0	0	4	0	0	0
			(10)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	inflammatory infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	accumulation of foamy cells		10	0	0	0	5	0	0	0	15	0	0	0	11	0	0	0
			(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																	
bone marrow																	
	granulation	<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(2)	(0)	(0)	(0)
	increased hematopoiesis	3	0	0	0	2	0	0	0	1	0	0	0	6	0	0	0
		(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
lymph node																	
	hemorrhage	<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
spleen																	
	congestion	<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin	2	0	0	0	5	0	0	0	3	1	0	0	3	0	0	0
		(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(0)	(0)	(0)
	fibrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	extramedullary hematopoiesis	4	2	0	0	4	0	0	0	3	2	0	0	7	1	2	0
		(8)	(4)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(4)	(0)	(0)	(14)	(2)	(4)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	myocardial fibrosis		7	0	0	0	6	0	0	0	11	0	0	0	7	0	0	0
			(14)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	odontogenic cyst		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
tongue			<50>				<50>				<50>				<50>			
	ulcer		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
tongue	squamous cell hyperplasia		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
stomach	ulcer:forestomach		<50>				<49>				<50>				<50>			
			2	2	0	0	1	0	1	0	0	1	0	0	0	1	0	0
			(4)	(4)	(0)	(0)	(2)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	1	0	0	0	1	2	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(4)	(2)	(0)	(0)
	erosion:glandular stomach		4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach		1	1	0	0	0	0	0	0	2	1	0	0	3	0	0	0
			(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(6)	(0)	(0)	(0)
small intes	ulcer		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	herniation		<50>				<50>				<50>				<50>			
			6	0	0	0	10	0	0	0	8	0	0	0	9	0	0	0
			(12)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(18)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 24

Organ_____	Findings_____	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Digestive system}																		
liver																		
			<50>				<50>				<50>				<50>			
	angiectasis		1	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	necrosis:central		0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0
			(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	2	0	0	0	2	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	fatty change:peripheral		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		2	0	0	0	6	0	0	0	3	0	0	0	2	0	0	0
			(4)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	granulation		10	0	1	0	19	3	0	0 *	23	3	1	0 **	16	0	0	0
			(20)	(0)	(2)	(0)	(38)	(6)	(0)	(0)	(46)	(6)	(2)	(0)	(32)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	clear cell focus		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 25

Organ_____	Findings_____	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Digestive system}																		
liver																		
			<50>				<50>				<50>				<50>			
	acidophilic cell focus		0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	basophilic cell focus		16	4	0	0	21	4	0	0	16	0	0	0	7	2	0	0
			(32)	(8)	(0)	(0)	(42)	(8)	(0)	(0)	(32)	(0)	(0)	(0)	(14)	(4)	(0)	(0)
	bile duct hyperplasia		12	0	0	0	6	0	0	0	7	0	0	0	8	0	1	0
			(24)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(16)	(0)	(2)	(0)
	cholangiofibrosis		1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	biliary cyst		0	0	0	0	0	0	0	0	2	0	0	0	3	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(2)	(0)	(0)
	focal fatty change		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
pancreas																		
			<50>				<50>				<50>				<50>			
	atrophy		11	0	0	0	8	0	0	0	2	0	0	0 *	4	0	1	0
			(22)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(2)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 26

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas			<50>				<50>				<50>				<50>			
	islet cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	necrosis:zonal		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	
	chronic nephropathy		13	4	1	0	17	1	1	0	13	5	0	0	17	0	0	0
			(26)	(8)	(2)	(0)	(34)	(2)	(2)	(0)	(26)	(10)	(0)	(0)	(34)	(0)	(0)	(0)
	mineralization:cortex		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	tubular necrosis:proximale tubule		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)
urin bladd			<50>				<50>				<50>				<50>			
	dilatation		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 27

Organ_____	Findings_____	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd			<50>				<50>				<50>				<50>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<49>				<50>				<50>				<50>			
	angiectasis		6	6	0	0	3	6	0	0	5	2	0	0	3	4	0	0
			(12)	(12)	(0)	(0)	(6)	(12)	(0)	(0)	(10)	(4)	(0)	(0)	(6)	(8)	(0)	(0)
	hemorrhage		0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cyst		17	3	0	0	16	1	0	0	20	2	1	0	11	1	0	0
			(35)	(6)	(0)	(0)	(32)	(2)	(0)	(0)	(40)	(4)	(2)	(0)	(22)	(2)	(0)	(0)
	hyperplasia		4	5	3	0	8	5	3	0	6	3	2	0	4	4	2	0
			(8)	(10)	(6)	(0)	(16)	(10)	(6)	(0)	(12)	(6)	(4)	(0)	(8)	(8)	(4)	(0)
	Rathke pouch		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	aberrant craniopharyngeal tissue		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 28

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
thyroid			<49>				<50>				<50>				<50>			
	C-cell hyperplasia		14 (29)	0 (0)	1 (2)	0 (0)	11 (22)	1 (2)	2 (4)	0 (0)	12 (24)	5 (10)	0 (0)	0 (0)	8 (16)	1 (2)	0 (0)	0 (0)
adrenal			<50>				<50>				<50>				<50>			
	necrosis:zonal		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	hyperplasia:cortical cell		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	1 (2)	0 (0)	0 (0)
	hyperplasia:medulla		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	focal fatty change:cortex		4 (8)	1 (2)	0 (0)	0 (0)	2 (4)	2 (4)	1 (2)	0 (0)	6 (12)	4 (8)	1 (2)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)
{Reproductive system}																		
ovary			<50>				<50>				<50>				<50>			
	cyst		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 29

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																	
uterus		<50>				<50>				<50>				<50>			
	cystic endometrial hyperplasia	10	0	0	0	11	1	0	0	8	0	0	0	11	0	0	0
		(20)	(0)	(0)	(0)	(22)	(2)	(0)	(0)	(16)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
{Nervous system}																	
brain		<50>				<50>				<50>				<50>			
	hemorrhage	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	mineralization	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Special sense organs/appendage}																	
eye		<50>				<50>				<50>				<50>			
	cataract	2	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0
		(4)	(4)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy	1	1	2	0	0	1	0	0	0	0	2	0	0	0	0	0
		(2)	(2)	(4)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 30

Organ	Findings	Group Name No. of Animals on Study Grade	Control				80 ppm				200 ppm				500 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye	keratitis		<50>				<50>				<50>				<50>			
			4	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0
			(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(2)	(0)
Harder gl	degeneration:focal		<50>				<50>				<50>				<50>			
			5	0	0	0	0	0	0	0	4	0	0	0	8	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(16)	(0)	(0)	(0)
	lymphocytic infiltration		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	4	0	0	0	5	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	granulation		<50>				<50>				<50>				<50>			
			3	0	0	0	4	0	0	0	3	0	0	0	2	0	0	0
			(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
{Musculoskeletal system}																		
bone	osteosclerosis		<50>				<50>				<50>				<50>			
			3	2	0	0	1	0	0	0	2	0	0	0	2	1	0	0
			(6)	(4)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(2)	(0)	(0)

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

APPENDIX L 5

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 13

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		13				9				12				18			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<13>				< 9>				<12>				<18>			
	thrombus	2 (15)	0 (0)	0 (0)	0 (0)	2 (22)	0 (0)	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
	squamous cell hyperplasia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	9 (50)	3 (17)	0 (0)	0 ** (0)
	hyperplasia:gland	0 (0)	0 (0)	0 (0)	0 (0)	4 (44)	0 (0)	0 (0)	0 * (0)	6 (50)	5 (42)	1 (8)	0 ** (0)	4 (22)	13 (72)	1 (6)	0 ** (0)
	goblet cell hyperplasia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (25)	0 (0)	0 (0)	0 (0)	16 (89)	0 (0)	0 (0)	0 ** (0)
	eosinophilic change:olfactory epithelium	3 (23)	9 (69)	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)
	eosinophilic change:respiratory epithelium	8 (62)	0 (0)	0 (0)	0 (0)	1 (11)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 ** (0)	1 (6)	0 (0)	0 (0)	0 ** (0)
	inflammation:respiratory epithelium	1 (8)	0 (0)	0 (0)	0 (0)	4 (44)	0 (0)	0 (0)	0 (0)	9 (75)	0 (0)	0 (0)	0 ** (0)	12 (67)	3 (17)	0 (0)	0 ** (0)
	respiratory metaplasia:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	8 (89)	0 (0)	0 (0)	0 ** (0)	4 (33)	8 (67)	0 (0)	0 ** (0)	0 (0)	17 (94)	1 (6)	0 ** (0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 14

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study				9				12				18			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<13>				< 9>				<12>				<18>			
	respiratory metaplasia:gland	11	0	0	0	8	0	0	0	12	0	0	0	18	0	0	0
		(85)	(0)	(0)	(0)	(89)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium	1	0	0	0	2	0	0	0	7	1	0	0 **	8	10	0	0 **
		(8)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(58)	(8)	(0)	(0)	(44)	(56)	(0)	(0)
	hyperplasia:transitional epithelium	1	0	0	0	2	2	0	0	9	1	0	0 **	12	5	1	0 **
		(8)	(0)	(0)	(0)	(22)	(22)	(0)	(0)	(75)	(8)	(0)	(0)	(67)	(28)	(6)	(0)
	sclerosis:lamina propria	0	0	0	0	1	0	0	0	3	0	0	0	6	0	0	0
		(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
	atrophy:olfactory epithelium	0	0	0	0	9	0	0	0 **	2	10	0	0 **	1	17	0	0 **
		(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(17)	(83)	(0)	(0)	(6)	(94)	(0)	(0)
lung		<13>				< 9>				<12>				<18>			
	congestion	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	edema	5	0	0	0	2	0	0	0	1	0	0	0	4	0	0	0
		(38)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	inflammatory infiltration	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 15

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	13				9				12				18			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Respiratory system}																		
lung			<13>				< 9>				<12>				<18>			
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	accumulation of foamy cells		0	0	0	0	0	0	0	0	5	0	0	0 *	3	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(42)	(0)	(0)	(0)	(17)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<13>				< 9>				<12>				<18>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	increased hematopoiesis		2	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0
			(15)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
spleen			<13>				< 9>				<12>				<18>			
	congestion		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin		2	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0
			(15)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(8)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 16

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	13				9				12				18			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<13>				< 9>				<12>				<18>			
	extramedullary hematopoiesis		0	2	0	0	1	0	0	0	1	2	0	0	2	0	2	0
			(0)	(15)	(0)	(0)	(11)	(0)	(0)	(0)	(8)	(17)	(0)	(0)	(11)	(0)	(11)	(0)
{Circulatory system}																		
heart			<13>				< 9>				<12>				<18>			
	thrombus		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		5	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0
			(38)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(17)	(0)	(0)	(0)
{Digestive system}																		
tongue			<13>				< 9>				<12>				<18>			
	ulcer		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 17

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study				9				12				18			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
stomach		<13>				< 8>				<12>				<18>			
	ulcer:forestomach	1 (8)	2 (15)	0 (0)	0 (0)	1 (13)	0 (0)	1 (13)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)
	hyperplasia:forestomach	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)	0 (0)	1 (8)	1 (8)	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	0 (0)
	erosion:glandular stomach	3 (23)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	ulcer:glandular stomach	1 (8)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	3 (17)	0 (0)	0 (0)	0 (0)
small intes		<13>				< 9>				<12>				<18>			
	ulcer	1 (8)	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)
liver		<13>				< 9>				<12>				<18>			
	herniation	0 (0)	0 (0)	0 (0)	0 (0)	1 (11)	0 (0)	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	0 (0)
	necrosis:central	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	1 (8)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 18

Organ	Findings	Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	13				9				12				18			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<13>				< 9>				<12>				<18>			
	necrosis:focal		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	fatty change:peripheral		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		0	0	0	0	1	0	0	0	3	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	
	basophilic cell focus		1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	
			(8)	(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	
	bile duct hyperplasia		1	0	0	0	2	0	0	0	4	0	0	2	0	0	0	
			(8)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(33)	(0)	(0)	(11)	(0)	(0)	(0)	
	focal fatty change		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	
pancreas			<13>				< 9>				<12>				<18>			
	atrophy		3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(23)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 19

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	13				9				12				18			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas			<13>				< 9>				<12>				<18>			
	islet cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
{Urinary system}																		
kidney			<13>				< 9>				<12>				<18>			
	necrosis:zonal		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		2	1	0	0	3	0	0	0	2	1	0	0	2	0	0	0
			(15)	(8)	(0)	(0)	(33)	(0)	(0)	(0)	(17)	(8)	(0)	(0)	(11)	(0)	(0)	(0)
	mineralization:cortex		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	tubular necrosis:proximale tubule		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)
urin bladd			<13>				< 9>				<12>				<18>			
	dilatation		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(8)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	13				9				12				18			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd			<13>				< 9>				<12>				<18>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<12>				< 9>				<12>				<18>			
	angiectasis		2	0	0	0	0	1	0	0	1	0	0	0	0	2	0	0
			(17)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(11)	(0)	(0)
	hemorrhage		0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	cyst		4	0	0	0	1	0	0	0	1	2	0	0	1	1	0	0
			(33)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(8)	(17)	(0)	(0)	(6)	(6)	(0)	(0)
	hyperplasia		1	1	2	0	0	0	1	0	1	1	1	0	4	1	0	0
			(8)	(8)	(17)	(0)	(0)	(0)	(11)	(0)	(8)	(8)	(8)	(0)	(22)	(6)	(0)	(0)
thyroid			<13>				< 9>				<12>				<18>			
	C-cell hyperplasia		0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(8)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name		Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study		13				9				12				18			
		Grade		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
				(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																			
adrenal	necrosis:zonal			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
				(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:cortical cell			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
				(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	hyperplasia:medulla			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
				(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex			1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
				(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)
{Reproductive system}																			
ovary	cyst			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
				(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
uterus	cystic endometrial hyperplasia			2	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0
				(15)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(25)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 22

Organ	Findings	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study				9				12				18			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																	
brain																	
	hemorrhage	<13>				< 9>				<12>				<18>			
		0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	mineralization	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
{Special sense organs/appendage}																	
eye																	
	cataract	<13>				< 9>				<12>				<18>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	keratitis	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(6)	(0)
Harder gl																	
	degeneration:focal	<13>				< 9>				<12>				<18>			
		3	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0
		(23)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(17)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade	Control 13				80 ppm 9				200 ppm 12				500 ppm 18			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Special sense organs/appendage}

Harder gl	lymphocytic infiltration	<13>				< 9>				<12>				<18>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	granulation	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

{Musculoskeletal system}

bone	osteosclerosis	<13>				< 9>				<12>				<18>			
		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

(HPT150)

BAIS4

APPENDIX L 6

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 14

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<37>				<41>				<38>				<32>			
	adhesion		0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	thrombus		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell hyperplasia		0	0	0	0	0	0	0	0	3	0	0	0	6	2	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(19)	(6)	(0)	(0)
	hyperplasia:gland		0	0	0	0	32	1	0	0 **	1	36	1	0 **	0	18	14	0 **
			(0)	(0)	(0)	(0)	(78)	(2)	(0)	(0)	(3)	(95)	(3)	(0)	(0)	(56)	(44)	(0)
	goblet cell hyperplasia		0	0	0	0	0	0	0	0	12	0	0	0 **	25	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(78)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		4	33	0	0	1	0	0	0 **	1	0	0	0 **	0	0	0	0 **
			(11)	(89)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium		33	0	0	0	11	0	0	0 **	5	0	0	0 **	1	0	0	0 **
			(89)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	inflammation:foreign body		2	0	0	0	6	1	0	0	7	0	0	0	4	1	0	0
			(5)	(0)	(0)	(0)	(15)	(2)	(0)	(0)	(18)	(0)	(0)	(0)	(13)	(3)	(0)	(0)

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

STUDY NO. : 0457
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 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 15

Organ	Findings	Control No. of Animals on Study Grade				80 ppm 41				200 ppm 38				500 ppm 32			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<37>				<41>				<38>				<32>			
	inflammation:respiratory epithelium	9 (24)	0 (0)	0 (0)	0 (0)	25 (61)	1 (2)	0 (0)	0 ** (0)	29 (76)	1 (3)	0 (0)	0 ** (0)	23 (72)	2 (6)	0 (0)	0 ** (0)
	respiratory metaplasia:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	41 (100)	0 (0)	0 (0)	0 ** (0)	14 (37)	24 (63)	0 (0)	0 ** (0)	1 (3)	31 (97)	0 (0)	0 ** (0)
	respiratory metaplasia:gland	34 (92)	0 (0)	0 (0)	0 (0)	41 (100)	0 (0)	0 (0)	0 (0)	38 (100)	0 (0)	0 (0)	0 (0)	32 (100)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium	2 (5)	0 (0)	0 (0)	0 (0)	13 (32)	0 (0)	0 (0)	0 ** (0)	24 (63)	5 (13)	0 (0)	0 ** (0)	17 (53)	11 (34)	0 (0)	0 ** (0)
	hyperplasia:transitional epithelium	1 (3)	0 (0)	0 (0)	0 (0)	15 (37)	1 (2)	1 (2)	0 ** (0)	26 (68)	3 (8)	0 (0)	0 ** (0)	19 (59)	5 (16)	6 (19)	0 ** (0)
	sclerosis:lamina propria	0 (0)	0 (0)	0 (0)	0 (0)	7 (17)	0 (0)	0 (0)	0 * (0)	9 (24)	0 (0)	0 (0)	0 ** (0)	18 (56)	0 (0)	0 (0)	0 ** (0)
	atrophy:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	41 (100)	0 (0)	0 (0)	0 ** (0)	1 (3)	37 (97)	0 (0)	0 ** (0)	1 (3)	31 (97)	0 (0)	0 ** (0)
	thickening of bone	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (9)	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

STUDY NO. : 0457
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 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 16

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	epithelial hyperplasia:peri-submucosal gland		<37>				<41>				<38>				<32>			
		0	0	0	0	37	4	0	0 **	14	24	0	0 **	10	22	0	0 **	
		(0)	(0)	(0)	(0)	(90)	(10)	(0)	(0)	(37)	(63)	(0)	(0)	(31)	(69)	(0)	(0)	
lung	accumulation of foamy cells		<37>				<41>				<38>				<32>			
		10	0	0	0	5	0	0	0	10	0	0	0	8	0	0	0	
			(27)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow	granulation		<37>				<41>				<38>				<32>			
		0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(3)	(0)	(0)	(0)
	increased hematopoiesis		1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
lymph node	hemorrhage		<37>				<41>				<38>				<32>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 17

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<37>				<41>				<38>				<32>			
	congestion		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	4	0	0	0	3	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	fibrosis:focal		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	extramedullary hematopoiesis		4	0	0	0	3	0	0	0	2	0	0	0	5	1	0	0
			(11)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(16)	(3)	(0)	(0)
{Circulatory system}																		
heart			<37>				<41>				<38>				<32>			
	necrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	myocardial fibrosis		2	0	0	0	3	0	0	0	9	0	0	0	4	0	0	0
			(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(13)	(0)	(0)	(0)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 18

		Group Name	Control				80 ppm				200 ppm				500 ppm				
		No. of Animals on Study	37				41				38				32				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
{Digestive system}																			
tooth	odontogenic cyst		<37>				<41>				<38>				<32>				
		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
tongue	squamous cell hyperplasia		<37>				<41>				<38>				<32>				
		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
stomach	ulcer:forestomach		<37>				<41>				<38>				<32>				
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
		erosion:glandular stomach	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
		ulcer:glandular stomach	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
liver	herniation		<37>				<41>				<38>				<32>				
		6	0	0	0	9	0	0	0	6	0	0	0	7	0	0	0	0	
			(16)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 19

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<37>				<41>				<38>				<32>			
	angiectasis		1	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	lymphocytic infiltration		2	0	0	0	6	0	0	0	3	0	0	0	2	0	0	0
			(5)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	granulation		10	0	1	0	18	3	0	0	20	3	1	0 *	12	0	0	0
			(27)	(0)	(3)	(0)	(44)	(7)	(0)	(0)	(53)	(8)	(3)	(0)	(38)	(0)	(0)	(0)
extramedullary hematopoiesis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
clear cell focus		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
acidophilic cell focus		0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
basophilic cell focus		15	2	0	0	21	4	0	0	15	0	0	0	5	2	0	0	
		(41)	(5)	(0)	(0)	(51)	(10)	(0)	(0)	(39)	(0)	(0)	(0)	(16)	(6)	(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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 20

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<37>				<41>				<38>				<32>			
	bile duct hyperplasia		11	0	0	0	4	0	0	0	3	0	0	0 *	6	0	1	0
			(30)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(19)	(0)	(3)	(0)
	cholangiofibrosis		1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)
	biliary cyst		0	0	0	0	0	0	0	0	2	0	0	0	3	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(9)	(3)	(0)	(0)
pancreas			<37>				<41>				<38>				<32>			
	atrophy		8	0	0	0	7	0	0	0	2	0	0	0	4	0	1	0
			(22)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(13)	(0)	(3)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	islet cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Urinary system}																		
kidney			<37>				<41>				<38>				<32>			
	chronic nephropathy		11	3	1	0	14	1	1	0	11	4	0	0	15	0	0	0
		(30)	(8)	(3)	(0)	(34)	(2)	(2)	(0)	(29)	(11)	(0)	(0)	(47)	(0)	(0)	(0)	

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 21

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<37>				<41>				<38>				<32>			
	angiectasis		4	6	0	0	3	5	0	0	4	2	0	0	3	2	0	0
			(11)	(16)	(0)	(0)	(7)	(12)	(0)	(0)	(11)	(5)	(0)	(0)	(9)	(6)	(0)	(0)
	cyst		13	3	0	0	15	1	0	0	19	0	1	0	10	0	0	0
			(35)	(8)	(0)	(0)	(37)	(2)	(0)	(0)	(50)	(0)	(3)	(0)	(31)	(0)	(0)	(0)
	hyperplasia		3	4	1	0	8	5	2	0	5	2	1	0	0	3	2	0
		(8)	(11)	(3)	(0)	(20)	(12)	(5)	(0)	(13)	(5)	(3)	(0)	(0)	(9)	(6)	(0)	
	Rathke pouch		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	aberrant craniopharyngeal tissue		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<36>				<41>				<38>				<32>			
	C-cell hyperplasia		14	0	1	0	10	1	2	0	12	4	0	0	7	1	0	0
			(39)	(0)	(3)	(0)	(24)	(2)	(5)	(0)	(32)	(11)	(0)	(0)	(22)	(3)	(0)	(0)
adrenal			<37>				<41>				<38>				<32>			
	extramedullary hematopoiesis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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(c) c : b / a * 100
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SACRIFICED ANIMALS (105W)

PAGE : 22

		Group Name	Control				80 ppm				200 ppm				500 ppm			
		No. of Animals on Study	37				41				38				32			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<37>				<41>				<38>				<32>			
	hyperplasia:cortical cell		1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
			(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)
	hyperplasia:medulla		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex		3	1	0	0	2	2	1	0	6	3	1	0	1	0	0	0
			(8)	(3)	(0)	(0)	(5)	(5)	(2)	(0)	(16)	(8)	(3)	(0)	(3)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<37>				<41>				<38>				<32>			
	cyst		1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
uterus			<37>				<41>				<38>				<32>			
	cystic endometrial hyperplasia		8	0	0	0	10	1	0	0	5	0	0	0	10	0	0	0
			(22)	(0)	(0)	(0)	(24)	(2)	(0)	(0)	(13)	(0)	(0)	(0)	(31)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<37>				<41>				<38>				<32>			
	cataract		1	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(3)	(5)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)

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

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 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 23

		Control				80 ppm				200 ppm				500 ppm				
		No. of Animals on Study				41				38				32				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye			<37>				<41>				<38>				<32>			
	retinal atrophy		0	1	2	0	0	1	0	0	0	0	2	0	0	0	0	0
			(0)	(3)	(5)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)
	keratitis		3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl			<37>				<41>				<38>				<32>			
	degeneration:focal		2	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(16)	(0)	(0)	(0)
	lymphocytic infiltration		1	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	granulation		3	0	0	0	3	0	0	0	3	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Musculoskeletal system}																		
bone			<37>				<41>				<38>				<32>			
	osteosclerosis		2	2	0	0	1	0	0	0	1	0	0	0	2	1	0	0
			(5)	(5)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(3)	(0)	(0)

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

APPENDIX M 1

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Time-related Weeks	Items	Group Name	Control	80 ppm	200 ppm	500 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	1	0	1
	NO. OF ANIMALS WITH TUMORS		0	1	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	1	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	1	0	0
	NO. OF TOTAL TUMORS		0	1	0	0
53 - 78	NO. OF EXAMINED ANIMALS		2	2	0	5
	NO. OF ANIMALS WITH TUMORS		1	1	0	5
	NO. OF ANIMALS WITH SINGLE TUMORS		0	1	0	4
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	0	1
	NO. OF BENIGN TUMORS		1	0	0	4
	NO. OF MALIGNANT TUMORS		1	1	0	2
	NO. OF TOTAL TUMORS		2	1	0	6
79 - 104	NO. OF EXAMINED ANIMALS		8	8	9	8
	NO. OF ANIMALS WITH TUMORS		8	8	9	8
	NO. OF ANIMALS WITH SINGLE TUMORS		3	2	0	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		5	6	9	6
	NO. OF BENIGN TUMORS		12	12	17	16
	NO. OF MALIGNANT TUMORS		5	5	7	4
	NO. OF TOTAL TUMORS		17	17	24	20
105 - 105	NO. OF EXAMINED ANIMALS		40	39	41	36
	NO. OF ANIMALS WITH TUMORS		40	39	40	36
	NO. OF ANIMALS WITH SINGLE TUMORS		20	16	17	7
	NO. OF ANIMALS WITH MULTIPLE TUMORS		20	23	23	29
	NO. OF BENIGN TUMORS		60	64	66	77
	NO. OF MALIGNANT TUMORS		9	5	5	12
	NO. OF TOTAL TUMORS		69	69	71	89

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Time-related Weeks	Items	Group Name	Control	80 ppm	200 ppm	500 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		49	49	49	49
	NO. OF ANIMALS WITH SINGLE TUMORS		23	20	17	13
	NO. OF ANIMALS WITH MULTIPLE TUMORS		26	29	32	36
	NO. OF BENIGN TUMORS		73	76	83	97
	NO. OF MALIGNANT TUMORS		15	12	12	18
	NO. OF TOTAL TUMORS		88	88	95	115

(HPT070)

BAIS4

APPENDIX M 2

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 3

Time-related Weeks	Items	Group Name	Control	80 ppm	200 ppm	500 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	1	0	2
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		4	2	4	4
	NO. OF ANIMALS WITH TUMORS		1	2	3	1
	NO. OF ANIMALS WITH SINGLE TUMORS		1	2	3	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	1	2	0
	NO. OF MALIGNANT TUMORS		1	1	1	1
	NO. OF TOTAL TUMORS		1	2	3	1
79 - 104	NO. OF EXAMINED ANIMALS		9	6	8	12
	NO. OF ANIMALS WITH TUMORS		8	6	8	10
	NO. OF ANIMALS WITH SINGLE TUMORS		5	2	7	5
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	4	1	5
	NO. OF BENIGN TUMORS		6	7	4	14
	NO. OF MALIGNANT TUMORS		6	3	5	2
	NO. OF TOTAL TUMORS		12	10	9	16
105 - 105	NO. OF EXAMINED ANIMALS		37	41	38	32
	NO. OF ANIMALS WITH TUMORS		23	25	21	25
	NO. OF ANIMALS WITH SINGLE TUMORS		18	10	15	12
	NO. OF ANIMALS WITH MULTIPLE TUMORS		5	15	6	13
	NO. OF BENIGN TUMORS		25	38	25	38
	NO. OF MALIGNANT TUMORS		3	4	3	3
	NO. OF TOTAL TUMORS		28	42	28	41

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Time-related Weeks	Items	Group Name	Control	80 ppm	200 ppm	500 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		32	33	32	36
	NO. OF ANIMALS WITH SINGLE TUMORS		24	14	25	18
	NO. OF ANIMALS WITH MULTIPLE TUMORS		8	19	7	18
	NO. OF BENIGN TUMORS		31	46	31	52
	NO. OF MALIGNANT TUMORS		10	8	9	6
	NO. OF TOTAL TUMORS		41	54	40	58

(HPT070)

BAIS4

APPENDIX N 1

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : MALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	basal cell epithelioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	keratoacanthoma		1 (2%)	0 (0%)	2 (4%)	0 (0%)
	sebaceous adenoma		0 (0%)	3 (6%)	1 (2%)	0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		2 (4%)	4 (8%)	8 (16%)	6 (12%)
	fibrosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	leiomyosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	schwannoma:malignant		0 (0%)	1 (2%)	0 (0%)	1 (2%)
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	2 (4%)	14 (28%)
	adenoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	adenoacanthoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)

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

(HPT085)

BAIS4

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Respiratory system}						
nasal cavit	ethesioneuroepithelioma		<50> 0 (0%)	<50> 2 (4%)	<50> 1 (2%)	<50> 0 (0%)
lung	bronchiolar-alveolar adenoma		<50> 2 (4%)	<50> 0 (0%)	<50> 0 (0%)	<50> 3 (6%)
{Hematopoietic system}						
bone marrow	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
spleen	mononuclear cell leukemia		<50> 7 (14%)	<50> 2 (4%)	<50> 4 (8%)	<50> 4 (8%)
{Digestive system}						
tongue	squamous cell papilloma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
stomach	squamous cell carcinoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
small intes	adenocarcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
large intes	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
liver	hepatocellular adenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
pancreas	islet cell adenoma		<50> 6 (12%)	<50> 2 (4%)	<50> 0 (0%)	<50> 2 (4%)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
(Digestive system)						
pancreas			<50>	<50>	<50>	<50>
	acinar cell adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
(Urinary system)						
kidney			<50>	<50>	<50>	<50>
	renal cell adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
urin bladd			<50>	<50>	<50>	<50>
	transitional cell papilloma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
(Endocrine system)						
pituitary			<50>	<50>	<50>	<50>
	adenoma		11 (22%)	8 (16%)	10 (20%)	7 (14%)
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	2 (4%)
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		6 (12%)	9 (18%)	7 (14%)	8 (16%)
	follicular adenoma		1 (2%)	0 (0%)	0 (0%)	3 (6%)
	C-cell carcinoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	follicular adenocarcinoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
adrenal			<50>	<50>	<50>	<50>
	pheochromocytoma		0 (0%)	1 (2%)	2 (4%)	1 (2%)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Endocrine system}						
adrenal	pheochromocytoma:malignant		<50> 1 (2%)	<50> 2 (4%)	<50> 1 (2%)	<50> 0 (0%)
{Reproductive system}						
testis	interstitial cell tumor		<50> 41 (82%)	<50> 45 (90%)	<50> 46 (92%)	<50> 45 (90%)
prep/cli gl	adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
{Nervous system}						
brain	malignant reticulosis		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	glioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Special sense organs/appendage}						
Harder gl	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
Zymbal gl	adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
{Musculoskeletal system}						
muscle	malignant fibrous histiocytoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
bone	fibroma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
(Musculoskeletal system)						
bone			<50>	<50>	<50>	<50>
	osteoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	osteosarcoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
(Body cavities)						
peritoneum			<50>	<50>	<50>	<50>
	mesothelioma		2 (4%)	2 (4%)	1 (2%)	3 (6%)
retroperit			<50>	<50>	<50>	<50>
	schwannoma:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	paraganglioma:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
adipose			<50>	<50>	<50>	<50>
	lipoma		2 (4%)	0 (0%)	0 (0%)	0 (0%)

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

(HPT085)

BAIS4

APPENDIX N 2

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : FEMALE

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	trichoepithelioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	basal cell epithelioma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	keratoacanthoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		1 (2%)	2 (4%)	1 (2%)	0 (0%)
	schwannoma:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	0 (0%)	9 (18%)
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		1 (2%)	2 (4%)	1 (2%)	0 (0%)
	bronchiolar-alveolar carcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	mononuclear cell leukemia		8 (16%)	6 (12%)	3 (6%)	2 (4%)
{Digestive system}						
tongue			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (2%)	1 (2%)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Digestive system}						
stomach			<50>	<49>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
liver			<50>	<50>	<50>	<50>
	hepatocellular adenoma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
{Urinary system}						
urin bladd			<50>	<50>	<50>	<50>
	transitional cell papilloma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Endocrine system}						
pituitary			<49>	<50>	<50>	<50>
	adenoma		11 (22%)	14 (28%)	15 (30%)	14 (28%)
	adenocarcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
thyroid			<49>	<50>	<50>	<50>
	C-cell adenoma		3 (6%)	4 (8%)	3 (6%)	3 (6%)
	follicular adenoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
	C-cell carcinoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
adrenal			<50>	<50>	<50>	<50>
	pheochromocytoma		1 (2%)	0 (0%)	2 (4%)	1 (2%)
	pheochromocytoma:malignant		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	granulosa cell tumor:benign		0 (0%)	1 (2%)	0 (0%)	0 (0%)

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	granulosa cell tumor:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
uterus			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	leiomyoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	endometrial stromal polyp		10 (20%)	15 (30%)	2 (4%)	3 (6%)
	adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	endometrial stromal sarcoma		0 (0%)	0 (0%)	2 (4%)	2 (4%)
mammary gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	2 (4%)	0 (0%)	4 (8%)
	fibroadenoma		2 (4%)	4 (8%)	3 (6%)	5 (10%)
prep/cli gl			<50>	<50>	<50>	<50>
	adenoma		1 (2%)	1 (2%)	0 (0%)	2 (4%)
{Nervous system}						
spinal cord			<50>	<50>	<50>	<50>
	glioma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Special sense organs/appendage}						
Zymbal gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	0 (0%)	1 (2%)	2 (4%)

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 9

Organ	Findings	Group Name No. of animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
-------	----------	---------------------------------------	---------------	--------------	---------------	---------------

{Musculoskeletal system}

bone			<50>	<50>	<50>	<50>
	osteosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)

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

(HPT085)

BAIS4

APPENDIX O 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : MALE

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : skin/appendage TUMOR : sebaceous adenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	1/50(2.0)	0/50(0.0)
Adjusted rates(b)	0.0	7.69	2.44	0.0
Terminal rates(c)	0/40(0.0)	3/39(7.7)	1/41(2.4)	0/36(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7855			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3659			
Fisher Exact test(e)		P = 0.1212	P = 0.5000	P = N.C.
SITE : subcutis TUMOR : fibroma				
Tumor rate				
Overall rates(a)	2/50(4.0)	4/50(8.0)	8/50(16.0)	6/50(12.0)
Adjusted rates(b)	5.00	10.26	16.67	10.53
Terminal rates(c)	2/40(5.0)	4/39(10.3)	6/41(14.6)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0376*			
Prevalence method(d)	P = 0.2180			
Combined analysis(d)	P = 0.0711			
Cochran-Armitage test(e)	P = 0.2056			
Fisher Exact test(e)		P = 0.3389	P = 0.0458*	P = 0.1343
SITE : subcutis TUMOR : fibroma, fibrosarcoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	5/50(10.0)	8/50(16.0)	6/50(12.0)
Adjusted rates(b)	5.00	12.82	16.67	10.53
Terminal rates(c)	2/40(5.0)	5/39(12.8)	6/41(14.6)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0376*			
Prevalence method(d)	P = 0.2661			
Combined analysis(d)	P = 0.0941			
Cochran-Armitage test(e)	P = 0.2717			
Fisher Exact test(e)		P = 0.2180	P = 0.0458*	P = 0.1343

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : nasal cavity TUMOR : squamous cell papilloma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	2/50(4.0)	14/50(28.0)
Adjusted rates(b)	0.0	0.0	4.88	36.84
Terminal rates(c)	0/40(0.0)	0/39(0.0)	2/41(4.9)	13/36(36.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = N. C.	P = 0.2475	P < 0.0001**
SITE : nasal cavity TUMOR : squamous cell papilloma, adenoma, adenoacanthoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	3/50(6.0)	15/50(30.0)
Adjusted rates(b)	0.0	0.0	7.32	39.47
Terminal rates(c)	0/40(0.0)	0/39(0.0)	3/41(7.3)	14/36(38.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = N. C.	P = 0.1212	P < 0.0001**
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	0/50(0.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	4.55	0.0	0.0	8.33
Terminal rates(c)	1/40(2.5)	0/39(0.0)	0/41(0.0)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0904			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2106			
Fisher Exact test(e)		P = 0.2475	P = 0.2475	P = 0.5000

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	7/50(14.0)	2/50(4.0)	4/50(8.0)	4/50(8.0)
Adjusted rates(b)	5.00	5.13	0.0	0.0
Terminal rates(c)	2/40(5.0)	2/39(5.1)	0/41(0.0)	0/36(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2971			
Prevalence method(d)	P = 0.9648			
Combined analysis(d)	P = 0.6142			
Cochran-Armitage test(e)	P = 0.6356			
Fisher Exact test(e)		P = 0.0798	P = 0.2623	P = 0.2623
SITE : pancreas TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	2/50(4.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	15.00	5.13	0.0	5.56
Terminal rates(c)	6/40(15.0)	2/39(5.1)	0/41(0.0)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8997			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1772			
Fisher Exact test(e)		P = 0.1343	P = 0.0133*	P = 0.1343
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	11/50(22.0)	8/50(16.0)	10/50(20.0)	7/50(14.0)
Adjusted rates(b)	20.45	20.51	19.51	17.95
Terminal rates(c)	6/40(15.0)	8/39(20.5)	8/41(19.5)	6/36(16.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8163			
Prevalence method(d)	P = 0.6169			
Combined analysis(d)	P = 0.7331			
Cochran-Armitage test(e)	P = 0.3938			
Fisher Exact test(e)		P = 0.3055	P = 0.5000	P = 0.2178

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	8/50(16.0)	10/50(20.0)	9/50(18.0)
Adjusted rates(b)	22.73	20.51	19.51	23.08
Terminal rates(c)	7/40(17.5)	8/39(20.5)	8/41(19.5)	8/36(22.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8163			
Prevalence method(d)	P = 0.4398			
Combined analysis(d)	P = 0.5747			
Cochran-Armitage test(e)	P = 0.6622			
Fisher Exact test(e)		P = 0.2270	P = 0.4048	P = 0.3121
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	9/50(18.0)	7/50(14.0)	8/50(16.0)
Adjusted rates(b)	11.11	22.50	17.07	22.22
Terminal rates(c)	4/40(10.0)	8/39(20.5)	7/41(17.1)	8/36(22.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000 ?			
Prevalence method(d)	P = 0.2463			
Combined analysis(d)	P = 0.3173			
Cochran-Armitage test(e)	P = 0.7783			
Fisher Exact test(e)		P = 0.2883	P = 0.5000	P = 0.3871
SITE : thyroid TUMOR : follicular adenoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	2.50	0.0	0.0	6.67
Terminal rates(c)	1/40(2.5)	0/39(0.0)	0/41(0.0)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0329*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0555			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.3087

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	9/50(18.0)	8/50(16.0)	9/50(18.0)
Adjusted rates(b)	11.11	22.50	17.07	25.00
Terminal rates(c)	4/40(10.0)	8/39(20.5)	7/41(17.1)	9/36(25.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6998			
Prevalence method(d)	P = 0.1580			
Combined analysis(d)	P = 0.2155			
Cochran-Armitage test(e)	P = 0.5559			
Fisher Exact test(e)		P = 0.2883	P = 0.3871	P = 0.2883
SITE : thyroid TUMOR : follicular adenoma, follicular adenocarcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	1/50(2.0)	4/50(8.0)
Adjusted rates(b)	2.50	0.0	2.44	8.89
Terminal rates(c)	1/40(2.5)	0/39(0.0)	1/41(2.4)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = ———			
Prevalence method(d)	P = 0.0143*			
Combined analysis(d)	P = ———			
Cochran-Armitage test(e)	P = 0.0246*			
Fisher Exact test(e)		P = 0.5000	P = 0.7525	P = 0.1811
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	1/50(2.0)	3/50(6.0)	3/50(6.0)	1/50(2.0)
Adjusted rates(b)	2.50	5.00	6.52	2.78
Terminal rates(c)	1/40(2.5)	1/39(2.6)	1/41(2.4)	1/36(2.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5602			
Prevalence method(d)	P = 0.5191			
Combined analysis(d)	P = 0.6015			
Cochran-Armitage test(e)	P = 0.6760			
Fisher Exact test(e)		P = 0.3087	P = 0.3087	P = 0.7525

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : testis TUMOR : interstitial cell tumor				
Tumor rate				
Overall rates(a)	41/50(82.0)	45/50(90.0)	46/50(92.0)	45/50(90.0)
Adjusted rates(b)	92.86	95.74	93.33	97.73
Terminal rates(c)	37/40(92.5)	37/39(94.9)	38/41(92.7)	35/36(97.2)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0168*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3596			
Fisher Exact test(e)		P = 0.1940	P = 0.1168	P = 0.1940
SITE : peritoneum TUMOR : mesothelioma				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	1/50(2.0)	3/50(6.0)
Adjusted rates(b)	5.00	2.22	2.08	8.33
Terminal rates(c)	2/40(5.0)	0/39(0.0)	0/41(0.0)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5545			
Prevalence method(d)	P = 0.1782			
Combined analysis(d)	P = 0.2505			
Cochran-Armitage test(e)	P = 0.5687			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.5000

(HPT360A)

BAIS4

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

APPENDIX O 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : FEMALE

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : nasal cavity TUMOR : squamous cell papilloma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	9/50(18.0)
Adjusted rates(b)	0.0	0.0	0.0	21.88
Terminal rates(c)	0/37(0.0)	0/41(0.0)	0/38(0.0)	7/32(21.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.0013**
SITE : nasal cavity TUMOR : squamous cell papilloma, adenoma, adenocanthoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	9/50(18.0)
Adjusted rates(b)	0.0	0.0	0.0	21.88
Terminal rates(c)	0/37(0.0)	0/41(0.0)	0/38(0.0)	7/32(21.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.0013**
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	8/50(16.0)	6/50(12.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	8.11	7.32	0.0	3.13
Terminal rates(c)	3/37(8.1)	3/41(7.3)	0/38(0.0)	1/32(3.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9206			
Prevalence method(d)	P = 0.8706			
Combined analysis(d)	P = 0.9685			
Cochran-Armitage test(e)	P = 0.0391*			
Fisher Exact test(e)		P = 0.3871	P = 0.0999	P = 0.0458*

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	11/49(22.4)	14/50(28.0)	15/50(30.0)	14/50(28.0)
Adjusted rates(b)	21.62	26.83	28.95	31.25
Terminal rates(c)	8/37(21.6)	11/41(26.8)	11/38(28.9)	10/32(31.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4151			
Prevalence method(d)	P = 0.1393			
Combined analysis(d)	P = 0.1574			
Cochran-Armitage test(e)	P = 0.6521			
Fisher Exact test(e)		P = 0.3434	P = 0.2663	P = 0.3434
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	11/49(22.4)	14/50(28.0)	16/50(32.0)	14/50(28.0)
Adjusted rates(b)	21.62	26.83	31.58	31.25
Terminal rates(c)	8/37(21.6)	11/41(26.8)	12/38(31.6)	10/32(31.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4151			
Prevalence method(d)	P = 0.1371			
Combined analysis(d)	P = 0.1551			
Cochran-Armitage test(e)	P = 0.6515			
Fisher Exact test(e)		P = 0.3434	P = 0.2003	P = 0.3434
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	3/49(6.1)	4/50(8.0)	3/50(6.0)	3/50(6.0)
Adjusted rates(b)	8.33	8.16	7.89	9.38
Terminal rates(c)	3/36(8.3)	3/41(7.3)	3/38(7.9)	3/32(9.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4927			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.8470			
Fisher Exact test(e)		P = 0.5114	P = 0.6708	P = 0.6708

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	4/49(8.2)	4/50(8.0)	3/50(6.0)	4/50(8.0)
Adjusted rates(b)	10.81	8.16	7.89	12.50
Terminal rates(c)	3/36(8.3)	3/41(7.3)	3/38(7.9)	4/32(12.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4363			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9778			
Fisher Exact test(e)		P = 0.6539	P = 0.4886	P = 0.6539
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	3/50(6.0)	1/50(2.0)
Adjusted rates(b)	2.70	0.0	7.89	3.13
Terminal rates(c)	1/37(2.7)	0/41(0.0)	3/38(7.9)	1/32(3.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.3044			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.7656			
Fisher Exact test(e)		P = 0.5000	P = 0.3087	P = 0.7525
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	10/50(20.0)	15/50(30.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	23.26	32.61	5.26	9.38
Terminal rates(c)	7/37(18.9)	13/41(31.7)	2/38(5.3)	3/32(9.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9973			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0041**			
Fisher Exact test(e)		P = 0.1779	P = 0.0139*	P = 0.0357*

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS--INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : mammary gland				
TUMOR : adenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	2/50(4.0)	0/50(0.0)	4/50(8.0)
Adjusted rates(b)	0.0	4.26	0.0	12.50
Terminal rates(c)	0/37(0.0)	0/41(0.0)	0/38(0.0)	4/32(12.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0123*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0307*			
Fisher Exact test(e)		P = 0.2475	P = N.C.	P = 0.0587
SITE : mammary gland				
TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	4/50(8.0)	3/50(6.0)	5/50(10.0)
Adjusted rates(b)	5.41	9.76	7.89	14.71
Terminal rates(c)	2/37(5.4)	4/41(9.8)	3/38(7.9)	3/32(9.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.1087			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3140			
Fisher Exact test(e)		P = 0.3389	P = 0.5000	P = 0.2180

(HPT360A)

BAIS4

STUDY No. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 11

Group Name	Control	80 ppm	200 ppm	500 ppm
SITE : mammary gland				
TUMOR : adenoma, fibroadenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	6/50(12.0)	3/50(6.0)	9/50(18.0)
Adjusted rates(b)	5.41	12.77	7.89	26.47
Terminal rates(c)	2/37(5.4)	4/41(9.8)	3/38(7.9)	7/32(21.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0086**			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0371*			
Fisher Exact test(e)		P = 0.1343	P = 0.5000	P = 0.0256*

(HPT360A)

BAIS4

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

APPENDIX P 1

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

MALE : ALL ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Group Name No. of Animals on Study		Control 50	80 ppm 50	200 ppm 50	500 ppm 50
Organ	Findings				
{Respiratory system}					
larynx		<50>	<50>	<50>	<50>
	metastasis:thyroid tumor	0	0	1	0
trachea		<50>	<50>	<50>	<50>
	metastasis:thyroid tumor	0	0	1	0
lung		<50>	<50>	<50>	<50>
	leukemic cell infiltration	5	2	4	2
	metastasis:adrenal tumor	1	1	1	0
	metastasis:thyroid tumor	0	0	1	0
	metastasis:subcutis tumor	0	1	0	0
	metastasis:bone tumor	1	0	0	0
	metastasis:muscle tumor	0	1	0	0
	metastasis:bone marrow tumor	0	0	0	1
{Hematopoietic system}					
bone marrow		<50>	<50>	<50>	<50>
	leukemic cell infiltration	3	1	4	2
lymph node	metastasis:muscle tumor	0	1	0	0
		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	1	1	0
thymus	metastasis:thyroid tumor	0	0	1	0
		<50>	<50>	<50>	<50>
	metastasis:thyroid tumor	0	0	1	0

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Group Name No. of Animals on Study		Control 50	80 ppm 50	200 ppm 50	500 ppm 50
Organ	Findings				
{Hematopoietic system}					
spleen		<50>	<50>	<50>	<50>
	metastasis:retroperitoneum tumor	1	0	0	0
	metastasis:bone marrow tumor	0	0	0	1
{Circulatory system}					
heart		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	1
{Digestive system}					
salivary gl		<50>	<50>	<50>	<50>
	metastasis:subcutis tumor	0	0	0	1
liver		<50>	<50>	<50>	<50>
	leukemic cell infiltration	7	2	4	3
	metastasis:muscle tumor	0	1	0	0
	metastasis:bone marrow tumor	0	0	0	1
pancreas		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	1
	metastasis:muscle tumor	0	1	0	0
{Urinary system}					
kidney		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	1
	metastasis:muscle tumor	0	1	0	0

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
{Urinary system}						
urin bladd	leukemic cell infiltration		<50> 0	<50> 0	<50> 0	<50> 1
	metastasis:muscle tumor		0	1	0	0
{Endocrine system}						
adrenal	leukemic cell infiltration		<50> 0	<50> 1	<50> 2	<50> 0
{Reproductive system}						
prostate	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 2
	metastasis:muscle tumor		0	1	0	0
{Nervous system}						
brain	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 1
	metastasis:pituitary tumor		1	0	0	2
	metastasis:nasal tumor		0	1	0	0
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	metastasis:muscle tumor		0	1	0	0

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

APPENDIX P 2

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

MALE : DEAD AND MORIBUND ANIMALS

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 1

Group Name No. of Animals on Study		Control 10	80 ppm 11	200 ppm 9	500 ppm 14
Organ	Findings				
{Respiratory system}					
larynx		<10>	<11>	< 9>	<14>
	metastasis:thyroid tumor	0	0	1	0
trachea		<10>	<11>	< 9>	<14>
	metastasis:thyroid tumor	0	0	1	0
lung		<10>	<11>	< 9>	<14>
	leukemic cell infiltration	4	0	4	2
	metastasis:thyroid tumor	0	0	1	0
	metastasis:subcutis tumor	0	1	0	0
	metastasis:muscle tumor	0	1	0	0
	metastasis:bone marrow tumor	0	0	0	1
{Hematopoietic system}					
bone marrow		<10>	<11>	< 9>	<14>
	leukemic cell infiltration	3	0	4	2
	metastasis:muscle tumor	0	1	0	0
lymph node		<10>	<11>	< 9>	<14>
	leukemic cell infiltration	1	0	1	0
	metastasis:thyroid tumor	0	0	1	0
thymus		<10>	<11>	< 9>	<14>
	metastasis:thyroid tumor	0	0	1	0
spleen		<10>	<11>	< 9>	<14>
	metastasis:retroperitoneum tumor	1	0	0	0
< a >		a : Number of animals examined at the site			
b		b : Number of animals with lesion			

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 2

		Group Name No. of Animals on Study	Control 10	80 ppm 11	200 ppm 9	500 ppm 14
Organ	Findings					
{Hematopoietic system}						
spleen	metastasis:bone marrow tumor		<10> 0	<11> 0	< 9> 0	<14> 1
{Circulatory system}						
heart	leukemic cell infiltration		<10> 0	<11> 0	< 9> 1	<14> 1
{Digestive system}						
liver	leukemic cell infiltration		<10> 5	<11> 0	< 9> 4	<14> 3
	metastasis:muscle tumor		0	1	0	0
	metastasis:bone marrow tumor		0	0	0	1
pancreas	leukemic cell infiltration		<10> 0	<11> 0	< 9> 1	<14> 1
	metastasis:muscle tumor		0	1	0	0
{Urinary system}						
kidney	leukemic cell infiltration		<10> 0	<11> 0	< 9> 1	<14> 1
	metastasis:muscle tumor		0	1	0	0
urin bladd	leukemic cell infiltration		<10> 0	<11> 0	< 9> 0	<14> 1
	metastasis:muscle tumor		0	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 3

		Group Name No. of Animals on Study	Control 10	80 ppm 11	200 ppm 9	500 ppm 14
Organ	Findings					
{Endocrine system}						
adrenal			<10>	<11>	< 9>	<14>
	leukemic cell infiltration		0	0	2	0
{Reproductive system}						
prostate			<10>	<11>	< 9>	<14>
	leukemic cell infiltration		1	0	0	2
	metastasis:muscle tumor		0	1	0	0
{Nervous system}						
brain			<10>	<11>	< 9>	<14>
	leukemic cell infiltration		1	0	0	1
	metastasis:nasal tumor		0	1	0	0
{Body cavities}						
peritoneum			<10>	<11>	< 9>	<14>
	metastasis:muscle tumor		0	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

APPENDIX P 3

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

MALE : SACRIFICED ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 1

Group Name No. of Animals on Study		Control 40	80 ppm 39	200 ppm 41	500 ppm 36
Organ	Findings				
{Respiratory system}					
lung		<40>	<39>	<41>	<36>
	leukemic cell infiltration	1	2	0	0
	metastasis:adrenal tumor	1	1	1	0
	metastasis:bone tumor	1	0	0	0
{Hematopoietic system}					
bone marrow		<40>	<39>	<41>	<36>
	leukemic cell infiltration	0	1	0	0
lymph node		<40>	<39>	<41>	<36>
	leukemic cell infiltration	0	1	0	0
{Digestive system}					
salivary gl		<40>	<39>	<41>	<36>
	metastasis:subcutis tumor	0	0	0	1
liver		<40>	<39>	<41>	<36>
	leukemic cell infiltration	2	2	0	0
{Endocrine system}					
adrenal		<40>	<39>	<41>	<36>
	leukemic cell infiltration	0	1	0	0
{Nervous system}					
brain		<40>	<39>	<41>	<36>
	metastasis:pituitary tumor	1	0	0	2

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

APPENDIX P 4

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

FEMALE : ALL ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 4

		Group Name No. of Animals on Study	Control 50	80 ppm 50	200 ppm 50	500 ppm 50
Organ	Findings					
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		5	4	2	2
	metastasis:adrenal tumor		0	0	1	0
	metastasis:thyroid tumor		1	0	0	0
	metastasis:bone tumor		0	0	1	0
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		6	3	2	1
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	0
{Circulatory system}						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		8	5	3	2
	metastasis:uterus tumor		0	0	1	0
	metastasis:ovary tumor		1	0	0	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	2	1

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Group Name No. of Animals on Study		Control 50	80 ppm 50	200 ppm 50	500 ppm 50
Organ	Findings				
{Urinary system}					
kidney		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	0	0	1
{Endocrine system}					
parathyroid		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
adrenal		<50>	<50>	<50>	<50>
	leukemic cell infiltration	2	0	0	0
	metastasis:subcutis tumor	0	0	0	1
{Reproductive system}					
uterus		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	1
{Nervous system}					
brain		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
	metastasis:pituitary tumor	0	0	1	0
spinal cord		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
{Special sense organs/appendage}					
Harder gl		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0

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

STUDY NO. : 0457
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Group Name		Control	80 ppm	200 ppm	500 ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
{Musculoskeletal system}					
muscle		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
{Body cavities}					
pleura		<50>	<50>	<50>	<50>
	metastasis:bone tumor	0	0	1	0
peritoneum		<50>	<50>	<50>	<50>
	metastasis:uterus tumor	0	0	1	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

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APPENDIX P 5

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

FEMALE : DEAD AND MORIBUND ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 4

Group Name No. of Animals on Study		Control 13	80 ppm 9	200 ppm 12	500 ppm 18
Organ	Findings				
{Respiratory system}					
lung	leukemic cell infiltration	<13> 4	< 9> 3	<12> 2	<18> 1
	metastasis:thyroid tumor	1	0	0	0
	metastasis:bone tumor	0	0	1	0
{Hematopoietic system}					
bone marrow	leukemic cell infiltration	<13> 5	< 9> 2	<12> 2	<18> 1
	lymph node	<13> 1	< 9> 0	<12> 1	<18> 0
{Digestive system}					
liver	leukemic cell infiltration	<13> 5	< 9> 3	<12> 3	<18> 1
	metastasis:uterus tumor	0	0	1	0
	metastasis:ovary tumor	1	0	0	0
pancreas	leukemic cell infiltration	<13> 0	< 9> 0	<12> 2	<18> 0
{Urinary system}					
kidney	leukemic cell infiltration	<13> 1	< 9> 0	<12> 0	<18> 1
{Endocrine system}					
parathyroid	leukemic cell infiltration	<13> 0	< 9> 0	<12> 1	<18> 0

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

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study	Control 13	80 ppm 9	200 ppm 12	500 ppm 18
{Endocrine system}						
adrenal	leukemic cell infiltration		<13> 2	< 9> 0	<12> 0	<18> 0
	metastasis:subcutis tumor		0	0	0	1
{Reproductive system}						
uterus	leukemic cell infiltration		<13> 0	< 9> 1	<12> 0	<18> 1
{Nervous system}						
brain	leukemic cell infiltration		<13> 0	< 9> 0	<12> 1	<18> 0
spinal cord	leukemic cell infiltration		<13> 0	< 9> 0	<12> 1	<18> 0
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<13> 0	< 9> 0	<12> 1	<18> 0
{Body cavities}						
pleura	metastasis:bone tumor		<13> 0	< 9> 0	<12> 1	<18> 0
peritoneum	metastasis:uterus tumor		<13> 0	< 9> 0	<12> 1	<18> 0

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

APPENDIX P 6

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

FEMALE : SACRIFICED ANIMALS

STUDY NO. : 0457
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 2

Group Name No. of Animals on Study		Control 37	80 ppm 41	200 ppm 38	500 ppm 32
Organ	Findings				
{Respiratory system}					
lung		<37>	<41>	<38>	<32>
	leukemic cell infiltration	1	1	0	1
	metastasis:adrenal tumor	0	0	1	0
{Hematopoietic system}					
bone marrow		<37>	<41>	<38>	<32>
	leukemic cell infiltration	1	1	0	0
{Circulatory system}					
heart		<37>	<41>	<38>	<32>
	leukemic cell infiltration	0	0	0	1
{Digestive system}					
liver		<37>	<41>	<38>	<32>
	leukemic cell infiltration	3	2	0	1
pancreas		<37>	<41>	<38>	<32>
	leukemic cell infiltration	0	0	0	1
{Nervous system}					
brain		<37>	<41>	<38>	<32>
	metastasis:pituitary tumor	0	0	1	0
{Special sense organs/appendage}					
Harder gl		<37>	<41>	<38>	<32>
	leukemic cell infiltration	0	1	0	0

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

APPENDIX Q

METHODS, UNITS AND DECIMAL PLACE FOR
HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR
INHALATION STUDY OF 1,2-DICHLOROPROPANE

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY
IN THE 2-YEAR INHALATION STUDY OF 1,2-DICHLOROPROPANE

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

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

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

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