アクリル酸のラットを用いた
吸入による2週間毒性試験報告書

試験番号：0638

APPENDICES

APPENDICES

APPENDICES (CONTINUED)

APPENDIX A 1

IDENTITY OF ACRYLIC ACID

IN THE 2-WEEK INHALATION STUDY

IDENTITY OF ACRYLIC ACID IN THE 2-WEEK INHALATION STUDY

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

Lot No. : EWE0688

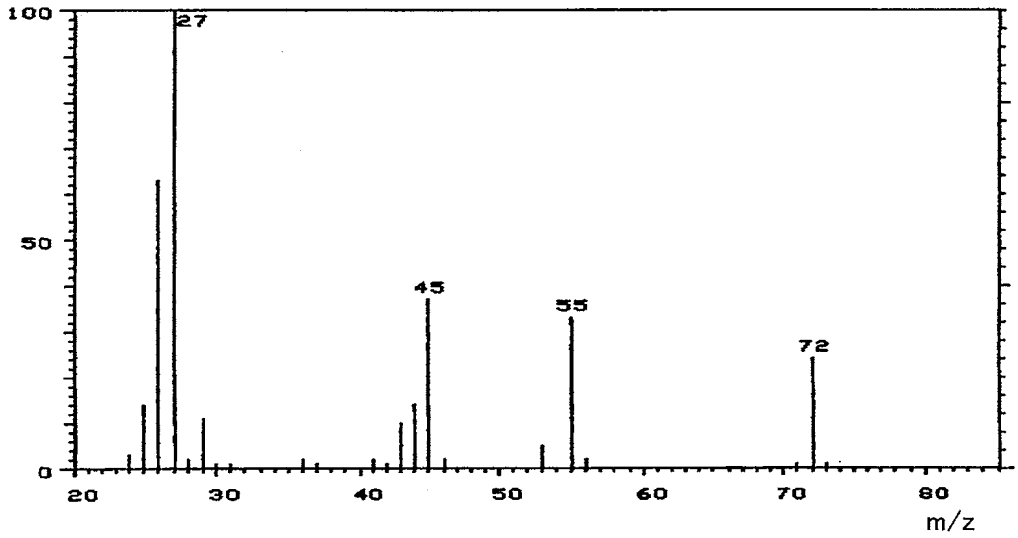
1. Spectral Data

Mass Spectrometry

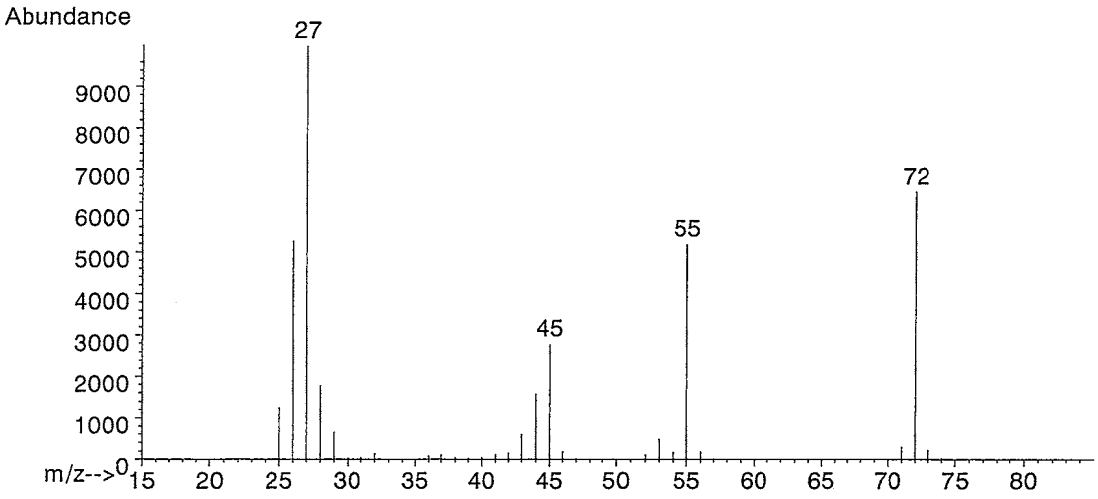
Instrument : Hitachi M-80B Mass Spectrometer

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.

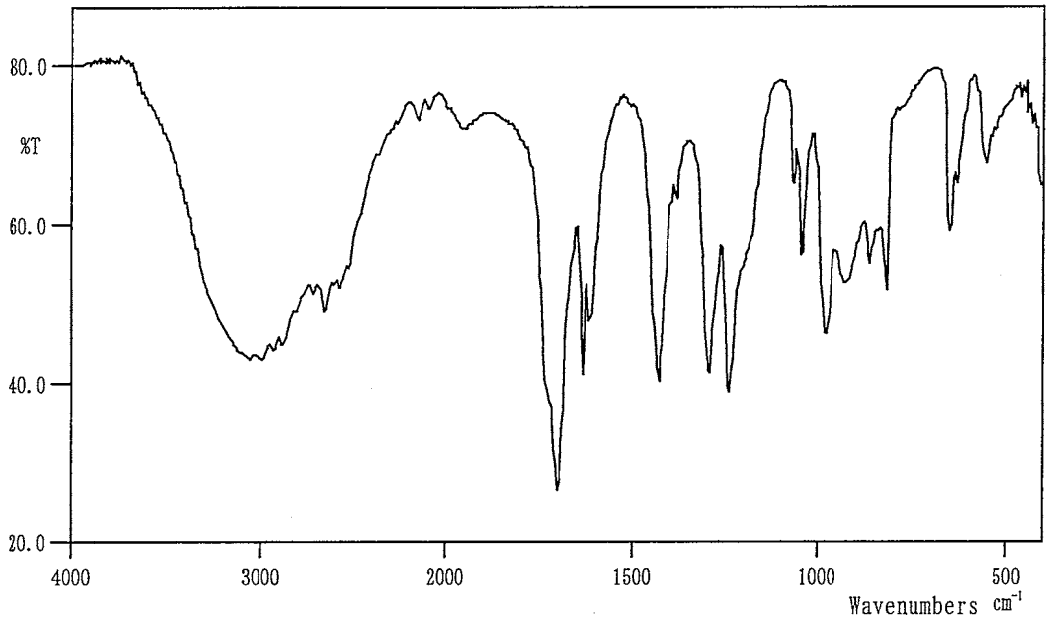
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed. New York, NY:John Wiley and Sons.)

Infrared Spectrometry

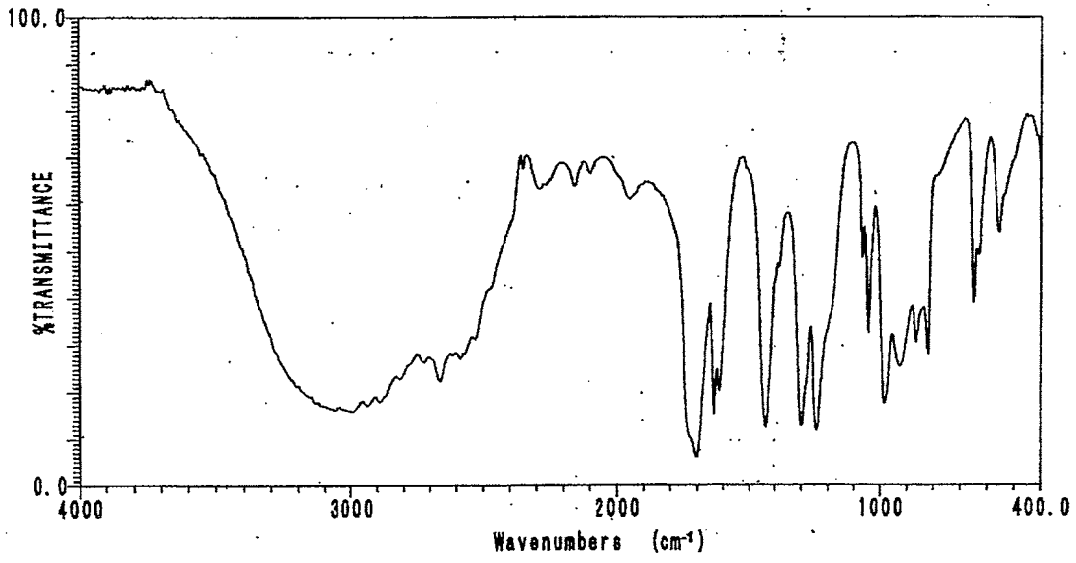
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

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 Wako Pure Chemical Industries, Ltd.)

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

APPENDIX A 2

STABILITY OF ACRYLIC ACID

IN THE 2-WEEK INHALATION STUDY

STABILITY OF ACRYLIC ACID IN THE 2-WEEK INHALATION STUDY

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

Lot No. : EWE0688

1. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : INNOWAX (0.53 mmϕ × 60 m)

Column Temperature: 150° C

Flow Rate : 20 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2006.03.13	1	3.399	100
2006.04.03	1	3.388	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2006.3.13 and one major peak (peak No.1) analyzed on 2006.4.3. No new trace impurity peak in the test substance analyzed on 2006.4.3 was detected.

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

APPENDIX B

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-WEEK INHALATION STUDY OF ACRYLIC ACID

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-WEEK INHALATION STUDY OF ACRYLIC ACID

Group Name	Temperature (℃) Mean ± S.D.	Humidity (%) Mean ± S.D.	Ventilation Rate (L/min) Mean ± S.D.	Air Change (time/h) Mean
Control	23.1 ± 0.3	56.3 ± 0.5	213.3 ± 1.4	12.1
38 ppm	23.0 ± 0.2	54.0 ± 2.6	212.9 ± 0.7	12.1
75 ppm	22.9 ± 0.3	53.9 ± 2.9	213.5 ± 0.6	12.1
150 ppm	22.9 ± 0.2	52.9 ± 3.4	213.3 ± 1.0	12.1
300 ppm	22.8 ± 0.3	50.7 ± 3.5	212.9 ± 0.5	12.1
600 ppm	22.7 ± 0.3	50.0 ± 4.1	212.8 ± 0.5	12.0

APPENDIX C 1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-2 1	1-4 1	1-4 2	1-5 1	1-5 2	1-6 1	1-6 2	1-7 1	1-7 2	2-1 1	2-1 2	2-3 1	2-4 2	2-5 2
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	2	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	5	0	5	0	1	0	5	0	4	5
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	0	4	4	4	5	5	5	5
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	0	0	4	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	3	5	5	5	5	5	5	5
NOSE SEROUS DISCHARGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	3	0	4	0	3	0	0	2
	600ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 2-6 2	2-7 1	2-7 2
LOCOMOTOR MOVEMENT DECR	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	0	0	0
SOILED	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	5	5
PILOERECTION	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	5	5
SOILED PERI-GENITALIA	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	0	0	3
CORNEAL OPACITY	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	5	5
NOSE SEROUS DISCHARGE	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	3
	600ppm	0	0	0

Clinical sign	Group Name	Administration Week-day 1-2 1	1-4 1	1-4 2	1-5 1	1-5 2	1-6 1	1-6 2	1-7 1	1-7 2	2-1 1	2-1 2	2-3 1	2-4 2	2-5 2
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	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
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	3	3	5	1	4	5	5	5	5	5	5	5
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	3	0	4	0	1	0	0	0
	600ppm	2	0	3	3	4	4	4	5	5	5	5	5	5	5
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 2-6 2	2-7 1	2-7 2
EROSION	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	1	1	1
IRREGULAR BREATHING	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	5	5
RESPIRATORY SOUND ABNOR	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	3
	600ppm	5	5	5
BRADYPNEA	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	0	0	0

APPENDIX C 2

CLINICAL OBSERVATION : FEMALE

Clinical sign	Group Name	Administration Week-day 1-2 1	1-4 1	1-4 2	1-5 1	1-5 2	1-6 1	1-6 2	1-7 1	1-7 2	2-1 1	2-1 2	2-3 1	2-4 2	2-5 2
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	3	1	2	0	1	0	1	1
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	1	0	1	0	1	0	0	0
	600ppm	0	0	0	0	5	0	5	3	4	0	5	0	4	5
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	1	5	5	5	4	5	5	5
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 2-6 2	2-7 1	2-7 2
DEATH	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	0	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	1	0	1
SOILED	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	4	4
PILOERECTION	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	4	4
TRAUMA	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	1	0	0
FROG BELLY	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	0	1	2

Clinical sign	Group Name	Administration Week-day 1-2 1	1-4 1	1-4 2	1-5 1	1-5 2	1-6 1	1-6 2	1-7 1	1-7 2	2-1 1	2-1 2	2-3 1	2-4 2	2-5 2
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	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
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	2	3	5	5	4	5	5	5
NOSE SEROUS DISCHARGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	2	0	5	0	2	0	0	2
	600ppm	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
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	2	2	2	2	2	2	2	3
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	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
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	2	2	3	3	5	5	5	5	4	5	5	5

Clinical sign	Group Name	Administration Week-day 2-6	2-7	2-7
		2	1	2
SOILED PERI-GENITALIA	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	2	0	1
CORNEAL OPACITY	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	4	4
NOSE SEROUS DISCHARGE	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	0	0	0
ANEMIA	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	4	3	4
EROSION	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	2	1	1
IRREGULAR BREATHING	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	4	4	3

Clinical sign	Group Name	Administration Week-day 1-2 1	1-4 1	1-4 2	1-5 1	1-5 2	1-6 1	1-6 2	1-7 1	1-7 2	2-1 1	2-1 2	2-3 1	2-4 2	2-5 2
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	3	0	5	0	0	0	0	0
	600ppm	0	0	2	2	3	3	5	5	5	5	4	5	5	5
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	600ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 2-6 2	2-7 1	2-7 2
RESPIRATORY SOUND ABNOR	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	5	4	4
DEEP BREATHING	Control	0	0	0
	38ppm	0	0	0
	75ppm	0	0	0
	150ppm	0	0	0
	300ppm	0	0	0
	600ppm	1	0	1

APPENDIX D 1

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-2	1-4	1-7	2-3	2-7
Control	123± 5	131± 6	136± 8	143± 8	154± 8	165± 8
38ppm	123± 5	128± 4	133± 6	141± 4	151± 5	162± 6
75ppm	123± 6	127± 8	133± 9	139± 9	151± 11	164± 13
150ppm	122± 7	124± 7	130± 6	133± 7	144± 7	156± 9
300ppm	123± 6	123± 6	131± 8	128± 8*	134± 9**	143± 10**
600ppm	122± 7	119± 6	126± 6	111± 5**	117± 7**	116± 7**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX D 2

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-2	1-4	1-7	2-3	2-7
Control	100± 5	103± 5	106± 6	109± 6	115± 6	122± 4
38ppm	100± 4	104± 6	107± 7	110± 7	114± 7	120± 6
75ppm	100± 4	104± 5	106± 6	108± 6	114± 4	121± 5
150ppm	100± 3	101± 5	105± 6	105± 5	112± 5	117± 9
300ppm	100± 4	101± 3	104± 3	102± 3	106± 4	111± 3*
600ppm	100± 4	95± 4	99± 4	85± 4**	87± 4**	88± 1**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX E 1

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration 1-7(6)	week-day(effective) 2-7(7)
Control	13.6± 0.9	14.3± 1.0
38ppm	13.7± 0.7	14.0± 0.7
75ppm	12.8± 0.8	13.6± 0.8
150ppm	12.5± 1.3	12.9± 1.1
300ppm	10.5± 0.7**	11.4± 0.9**
600ppm	8.1± 0.3**	9.8± 1.0**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX E 2

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration 1-7(6)	week-day(effective) 2-7(7)
Control	11.1± 0.5	11.2± 0.4
38ppm	11.1± 0.8	11.4± 0.9
75ppm	10.7± 0.7	11.2± 0.6
150ppm	10.1± 1.0	11.0± 1.0
300ppm	9.3± 0.6**	9.8± 0.1*
600ppm	6.5± 0.7**	7.6± 1.0**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX F 1

HEMATOLOGY : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV fℓ	MCH pg	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	5	9.04± 0.20	16.6± 0.3	45.9± 0.8	50.7± 0.5	18.4± 0.2	36.1± 0.2	941± 54
38ppm	5	8.92± 0.20	16.4± 0.4	45.4± 0.9	51.0± 0.3	18.4± 0.2	36.1± 0.2	968± 37
75ppm	5	8.89± 0.18	16.3± 0.3	45.2± 0.5	50.8± 0.5	18.3± 0.2	36.1± 0.3	964± 68
150ppm	5	9.04± 0.25	16.3± 0.2	45.6± 0.8	50.4± 0.6	18.1± 0.3	35.9± 0.2	921± 27
300ppm	5	9.14± 0.24	16.7± 0.5	46.2± 1.1	50.5± 0.3	18.2± 0.0	36.1± 0.3	806± 41**
600ppm	5	8.80± 1.21	16.1± 2.2	45.0± 5.5	51.3± 1.0	18.3± 0.1	35.7± 0.6	776± 102**

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

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	RETICULOCYTE %
Control	5	2.3± 0.2
38ppm	5	2.2± 0.2
75ppm	5	2.4± 0.4
150ppm	5	2.1± 0.1
300ppm	5	1.4± 0.3**
600ppm	5	4.6± 3.6

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%)
Control	5	5.70± 0.67	
38ppm	5	5.69± 1.38	
75ppm	5	5.75± 1.03	
150ppm	5	5.82± 0.76	
300ppm	5	5.28± 1.39	
600ppm	5	4.22± 1.80	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX F 2

HEMATOLOGY : FEMALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	5	9.21± 0.38	17.2± 0.6	46.2± 1.7	50.2± 0.6	18.7± 0.3	37.1± 0.4	876± 79
38ppm	5	9.32± 0.16	17.4± 0.5	47.1± 1.0	50.5± 0.6	18.7± 0.3	36.9± 0.3	829± 86
75ppm	5	9.17± 0.22	17.0± 0.3	46.3± 0.8	50.5± 0.4	18.5± 0.2	36.7± 0.2	855± 21
150ppm	5	9.06± 0.34	16.9± 0.5	45.7± 1.4	50.4± 0.4	18.6± 0.3	37.1± 0.6	869± 49
300ppm	5	9.41± 0.23	17.3± 0.4	47.3± 1.1	50.2± 0.1	18.4± 0.0	36.7± 0.1	737± 67
600ppm	4	8.54± 1.22	16.0± 2.2	44.4± 5.8	52.1± 2.8	18.7± 0.4	36.0± 1.2	830± 105

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	RETICULOCYTE %
Control	5	1.4± 0.3
38ppm	5	1.4± 0.2
75ppm	5	1.3± 0.1
150ppm	5	1.3± 0.3
300ppm	5	1.0± 0.1**
600ppm	4	5.5± 3.6*

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%)
Control	5	5.59± 0.73	
38ppm	5	4.70± 1.49	
75ppm	5	5.81± 1.58	
150ppm	5	4.42± 1.41	
300ppm	5	4.83± 1.32	
600ppm	4	2.41± 0.34**	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX G 1

GROSS FINDINGS : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 3W)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	38ppm 5 (%)	75ppm 5 (%)	150ppm 5 (%)
thymus	atrophic		0 (0)	0 (0)	0 (0)	0 (0)
liver	herniation		1 (20)	0 (0)	0 (0)	0 (0)
eye	turbid		0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 3W)

Organ	Findings	Group Name / NO. of Animals	300ppm 5 (%)	600ppm 5 (%)
thymus	atrophic		0 (0)	4 (80)
liver	herniation		0 (0)	1 (20)
eye	turbid		0 (0)	5 (100)

APPENDIX G 2

GROSS FINDINGS : FEMALE

DEAD AND MORIBUND ANIMALS

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 3W)

Organ	Findings	Group Name / NO. of Animals	Control 0 (%)	38ppm 0 (%)	75ppm 0 (%)	150ppm 0 (%)
thymus	atrophic		- (-)	- (-)	- (-)	- (-)
stomach	gas		- (-)	- (-)	- (-)	- (-)
small intes	gas		- (-)	- (-)	- (-)	- (-)
large intes	gas		- (-)	- (-)	- (-)	- (-)
eye	turbid		- (-)	- (-)	- (-)	- (-)
other	nose:erosion		- (-)	- (-)	- (-)	- (-)

Organ	Findings	Group Name NO. of Animals	300ppm 0 (%)	600ppm 1 (%)
thymus	atrophic		- (-)	1 (100)
stomach	gas		- (-)	1 (100)
small intes	gas		- (-)	1 (100)
large intes	gas		- (-)	1 (100)
eye	turbid		- (-)	1 (100)
other	nose:erosion		- (-)	1 (100)

APPENDIX G 3

GROSS FINDINGS : FEMALE

SACRIFICED ANIMALS

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (3W)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	38ppm 5 (%)	75ppm 5 (%)	150ppm 5 (%)
thymus	atrophic		0 (0)	0 (0)	0 (0)	0 (0)
gl stomach	red zone		0 (0)	0 (0)	0 (0)	0 (0)
small intes	gas		0 (0)	0 (0)	0 (0)	0 (0)
large intes	gas		0 (0)	0 (0)	0 (0)	0 (0)
liver	herniation		0 (0)	2 (40)	2 (40)	0 (0)
eye	turbid		0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (3W)

Organ	Findings	Group Name	300ppm	600ppm
		NO. of Animals	5 (%)	4 (%)
thymus	atrophic		0 (0)	4 (100)
gl stomach	red zone		0 (0)	1 (25)
small intes	gas		0 (0)	1 (25)
large intes	gas		0 (0)	1 (25)
liver	herniation		0 (0)	1 (25)
eye	turbid		0 (0)	4 (100)

APPENDIX H 1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	148± 7	0.241± 0.024	0.041± 0.002	2.282± 0.208	0.621± 0.045	0.610± 0.040
38ppm	5	146± 4	0.252± 0.021	0.039± 0.005	2.272± 0.130	0.596± 0.037	0.631± 0.027
75ppm	5	146± 11	0.254± 0.019	0.041± 0.004	2.377± 0.137	0.594± 0.038	0.637± 0.033
150ppm	5	138± 8	0.226± 0.017	0.042± 0.003	2.245± 0.110	0.591± 0.037	0.606± 0.028
300ppm	5	127± 9**	0.178± 0.036**	0.045± 0.004	2.223± 0.236	0.571± 0.026	0.576± 0.024
600ppm	5	101± 8**	0.054± 0.013**	0.049± 0.004**	1.919± 0.254*	0.540± 0.058	0.580± 0.030

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	1.132± 0.072	0.350± 0.029	4.373± 0.189	1.661± 0.041
38ppm	5	1.142± 0.048	0.349± 0.015	4.307± 0.137	1.655± 0.033
75ppm	5	1.143± 0.081	0.349± 0.030	4.197± 0.411	1.664± 0.049
150ppm	5	1.096± 0.066	0.322± 0.015	4.019± 0.272	1.638± 0.013
300ppm	5	1.062± 0.055	0.279± 0.040**	3.775± 0.303*	1.633± 0.045
600ppm	5	1.009± 0.068*	0.187± 0.018**	3.207± 0.304**	1.598± 0.031

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX H 2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	109± 4	0.222± 0.025	0.051± 0.004	0.064± 0.009	0.471± 0.052	0.537± 0.031
38ppm	5	107± 5	0.209± 0.011	0.049± 0.004	0.068± 0.012	0.456± 0.030	0.543± 0.034
75ppm	5	108± 5	0.215± 0.015	0.050± 0.005	0.073± 0.010	0.472± 0.016	0.544± 0.029
150ppm	5	104± 6	0.215± 0.025	0.049± 0.004	0.068± 0.008	0.479± 0.034	0.545± 0.038
300ppm	5	98± 3**	0.172± 0.016**	0.051± 0.003	0.065± 0.007	0.454± 0.008	0.520± 0.026
600ppm	4	73± 3**	0.029± 0.014**	0.054± 0.003	0.040± 0.008**	0.400± 0.048	0.508± 0.027

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.926± 0.026	0.269± 0.025	3.223± 0.235	1.597± 0.059
38ppm	5	0.928± 0.031	0.263± 0.016	3.279± 0.246	1.602± 0.026
75ppm	5	0.933± 0.032	0.272± 0.025	3.330± 0.183	1.591± 0.034
150ppm	5	0.936± 0.035	0.255± 0.021	3.230± 0.278	1.572± 0.029
300ppm	5	0.948± 0.032	0.239± 0.022	3.054± 0.138	1.567± 0.027
600ppm	4	0.854± 0.040*	0.118± 0.038**	2.483± 0.428**	1.531± 0.015

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX I 1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	148± 7	0.163± 0.015	0.028± 0.003	1.539± 0.101	0.419± 0.027	0.412± 0.018
38ppm	5	146± 4	0.172± 0.017	0.027± 0.003	1.553± 0.053	0.407± 0.018	0.432± 0.017
75ppm	5	146± 11	0.174± 0.007	0.028± 0.003	1.636± 0.125	0.409± 0.025	0.438± 0.013
150ppm	5	138± 8	0.163± 0.008	0.031± 0.002	1.624± 0.071	0.427± 0.005	0.438± 0.016
300ppm	5	127± 9**	0.140± 0.021	0.035± 0.003*	1.758± 0.170*	0.452± 0.021	0.457± 0.026**
600ppm	5	101± 8**	0.054± 0.011**	0.050± 0.008**	1.900± 0.149**	0.535± 0.024**	0.577± 0.025**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.763± 0.015	0.236± 0.009	2.953± 0.098	1.122± 0.047
38ppm	5	0.781± 0.011	0.239± 0.008	2.946± 0.024	1.133± 0.036
75ppm	5	0.785± 0.032	0.240± 0.012	2.875± 0.061	1.145± 0.068
150ppm	5	0.792± 0.022	0.233± 0.003	2.902± 0.035	1.186± 0.071
300ppm	5	0.840± 0.019**	0.220± 0.031	2.980± 0.047	1.294± 0.070**
600ppm	5	1.004± 0.053**	0.185± 0.010*	3.179± 0.069**	1.592± 0.107**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 · Test of Dunnett

APPENDIX I 2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	109± 4	0.204± 0.016	0.047± 0.002	0.059± 0.006	0.431± 0.036	0.493± 0.017
38ppm	5	107± 5	0.196± 0.014	0.046± 0.002	0.063± 0.009	0.425± 0.021	0.506± 0.014
75ppm	5	108± 5	0.199± 0.009	0.047± 0.005	0.067± 0.008	0.437± 0.012	0.503± 0.007
150ppm	5	104± 6	0.206± 0.013	0.047± 0.003	0.065± 0.005	0.459± 0.029	0.522± 0.017
300ppm	5	98± 3**	0.175± 0.011*	0.053± 0.004	0.067± 0.006	0.466± 0.010	0.533± 0.018*
600ppm	4	73± 3**	0.040± 0.019**	0.073± 0.007**	0.054± 0.009	0.545± 0.051**	0.694± 0.036**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (3W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.850± 0.014	0.246± 0.016	2.954± 0.120	1.467± 0.066
38ppm	5	0.866± 0.034	0.245± 0.016	3.056± 0.095	1.497± 0.056
75ppm	5	0.865± 0.018	0.252± 0.013	3.082± 0.059	1.475± 0.056
150ppm	5	0.898± 0.031*	0.245± 0.014	3.091± 0.117	1.511± 0.090
300ppm	5	0.972± 0.009**	0.245± 0.017	3.128± 0.051	1.606± 0.044**
600ppm	4	1.166± 0.020**	0.160± 0.048**	3.376± 0.471	2.092± 0.065**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX J 1

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : MALE

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0- 3W)

Organ	Findings	Group Name	Control				38ppm				75ppm				150ppm			
		No. of Animals on Study	5				5				5				5			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			< 5>				< 5>				< 5>				< 5>			
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	4	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(80)	(20)	(0)	(0)
	ulcer:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	necrosis:olfactory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(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

Organ	Findings	Group Name	300ppm				600ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 5>			
	inflammation:respiratory epithelium		1	0	0	0	0	5	0	0
			(20)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		0	5	0	0	0	0	5	0
			(0)	(100)	(0)	(0)	(0)	(0)	(100)	(0)
	ulcer:respiratory epithelium		0	0	0	0	0	5	0	0
			(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
	atrophy:olfactory epithelium		0	5	0	0	0	5	0	0
			(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)
	necrosis:olfactory epithelium		4	0	0	0	2	3	0	0
			(80)	(0)	(0)	(0)	(40)	(60)	(0)	(0)
	necrosis:respiratory epithelium		4	0	0	0	0	5	0	0
			(80)	(0)	(0)	(0)	(0)	(100)	(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

APPENDIX J 2

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : FEMALE

DEAD AND MORIBUND ANIMALS

STUDY NO. : 0638
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 3W)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control				38ppm				75ppm				150ppm			
			0				0				0				0			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			< 0>				< 0>				< 0>				< 0>			
	ulcer		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Respiratory system}																		
nasal cavit			< 0>				< 0>				< 0>				< 0>			
	inflammation:respiratory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	squamous cell metaplasia:respiratory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	ulcer:respiratory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	atrophy:olfactory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	necrosis:olfactory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	necrosis:respiratory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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

Organ	Findings	Group Name	300ppm				600ppm			
		No. of Animals on Study	0				1			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}										
skin/app			< 0>				< 1>			
	ulcer		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
{Respiratory system}										
nasal cavit			< 0>				< 1>			
	inflammation:respiratory epithelium		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
	ulcer:respiratory epithelium		-	-	-	-	0	0	1	0
			(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)
	atrophy:olfactory epithelium		-	-	-	-	0	0	1	0
			(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)
	necrosis:olfactory epithelium		-	-	-	-	0	0	1	0
			(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)
	necrosis:respiratory epithelium		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(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

APPENDIX J 3

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : FEMALE

SACRIFICED ANIMALS

Organ	Findings	Group Name	Control				38ppm				75ppm				150ppm			
		No. of Animals on Study	5				5				5				5			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			< 5>				< 5>				< 5>				< 5>			
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	4	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(80)	(20)	(0)	(0)
	squamous cell metaplasia:olfactory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	necrosis:olfactory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
stomach			< 0>				< 0>				< 0>				< 0>			
	erosion:glandular stomach		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	300ppm				600ppm			
		No. of Animals on Study	5				4			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 4>			
	inflammation:respiratory epithelium		3	0	0	0	2	2	0	0
			(60)	(0)	(0)	(0)	(50)	(50)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		0	5	0	0	0	2	2	0
			(0)	(100)	(0)	(0)	(0)	(50)	(50)	(0)
	squamous cell metaplasia:olfactory epithelium		1	0	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:respiratory epithelium		0	0	0	0	1	3	0	0
			(0)	(0)	(0)	(0)	(25)	(75)	(0)	(0)
	atrophy:olfactory epithelium		0	5	0	0	0	4	0	0
			(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)
	necrosis:olfactory epithelium		3	2	0	0	3	1	0	0
			(60)	(40)	(0)	(0)	(75)	(25)	(0)	(0)
	necrosis:respiratory epithelium		4	0	0	0	0	4	0	0
			(80)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
{Digestive system}										
stomach			< 0>				< 1>			
	erosion:glandular stomach		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(100)	(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

APPENDIX K

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY IN THE 2-WEEK INHALATION STUDY OF ACRYLIC ACID

METHODS,UNITS AND DECIMAL PLACE FOR HEMATOLOGY IN THE 2-WEEK INHALATION STUDY OF ACRYLIC ACID

Item	Method [1)]	Unit	Decimal place
Hematology			
Red blood cell (RBC)	Light scattering method	$\times 10^6/\mu L$	2
Hemoglobin(Hgb)	Cyanmethemoglobin method	g/dL	1
Hematocrit(Hct)	Calculated as RBC×MCV/10	%	1
Mean corpuscular volume(MCV)	Light scattering method	fL	1
Mean corpuscular hemoglobin(MCH)	Calculated as Hgb/RBC×10	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct×100	g/dL	1
Platelet	Light scattering method	$\times 10^3/\mu L$	0
Reticulocyte	Light scattering method	%	1
White blood cell(WBC)	Light scattering method	$\times 10^3/\mu L$	2

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