

1-ブロモ-3-クロロプロバンのラットを用いた  
吸入による 2 週間毒性試験報告書

試験番号：0379

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## APPENDIXES

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1-BROMO-3-CHLOROPROPANE

## APPENDIX A 1

BODY WEIGHT CHANGES :SUMMARY, RAT : MALE  
(2-WEEK STUDY)

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 UNIT : g  
 REPORT TYPE : A1 2  
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 1

Group Name	Administration		week-day									
	0-0		1-2		1-4		1-7		2-3		2-7	
Control	112±	5	116±	6	119±	6	128±	7	136±	7	146±	8
50ppm	112±	5	119±	5	122±	6	131±	6	140±	7	154±	7
100ppm	112±	4	118±	6	121±	6	131±	7	142±	9	155±	10
200ppm	112±	4	116±	5	121±	5	133±	8	143±	8	158±	10
400ppm	112±	5	116±	7	115±	7	123±	8	130±	10	141±	10
800ppm	112±	5	100±	3**	-		-		-		-	

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

Test of Dunnett

## APPENDIX A 2

BODY WEIGHT CHANGES : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 UNIT : g  
 REPORT TYPE : A1 2  
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 2

Group Name	Administration week-day					
	0-0	1-2	1-4	1-7	2-3	2-7
Control	93± 2	98± 4	101± 4	103± 4	109± 5	115± 6
50ppm	93± 3	98± 3	100± 3	105± 2	108± 4	116± 1
100ppm	93± 3	96± 3	100± 3	105± 5	110± 3	116± 6
200ppm	93± 2	95± 3	97± 2	103± 3	108± 3	116± 4
400ppm	93± 3	95± 4	94± 4*	100± 4	102± 4	109± 6
800ppm	93± 2	86± 2**	-	-	-	-

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

Test of Dunnett



## APPENDIX B 1

FOOD CONSUMPTION CHANGES : SUMMARY, RAT : MALE  
(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
UNIT : g  
REPORT TYPE : A1 2  
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 1

Group Name	Administration week-day(effective)	
	1-7 (6)	2-7 (7)
Control	14.2± 1.8	13.9± 1.3
50ppm	13.8± 0.8	14.2± 0.8
100ppm	13.9± 0.6	15.1± 0.5
200ppm	14.2± 1.5	15.1± 1.2
400ppm	12.2± 1.2	13.7± 1.3
800ppm	-	-

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

Test of Dunnett

## APPENDIX B 2

FOOD CONSUMPTION CHANGES : SUMMARY, RAT : FEMALE  
(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
UNIT : g  
REPORT TYPE : A1 2  
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 2

Group Name	Administration week-day(effective)	
	1-7 (6)	2-7 (7)
Control	12.0± 0.8	11.1± 1.0
50ppm	11.7± 0.8	11.1± 0.5
100ppm	11.7± 0.5	11.2± 0.7
200ppm	11.0± 0.5	11.0± 0.8
400ppm	10.9± 0.9	10.3± 0.9
800ppm	-	-

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

Test of Dunnett

## APPENDIX C 1

HEMATOLOGY : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
MEASURE. TIME : 1  
SEX : MALE

HEMATOLOGY (SUMMARY)  
ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	RED BLOOD CELL 10 <sup>6</sup> /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 <sup>3</sup> /μl	
Control	5	8.83±	0.27	16.2±	0.5	47.5±	1.4	53.7±	0.4	18.4±	0.1	34.2±	0.1	858±	71
50ppm	5	8.56±	0.08	15.8±	0.1	46.1±	0.7	53.9±	0.7	18.4±	0.1	34.2±	0.4	937±	44
100ppm	5	8.58±	0.20	15.8±	0.3	46.5±	0.6	54.2±	0.6	18.4±	0.2	33.9±	0.3	950±	72
200ppm	5	8.44±	0.22	15.4±	0.3	45.7±	0.8	54.1±	0.5	18.3±	0.2	33.8±	0.2	1012±	56**
400ppm	5	8.65±	0.23	15.6±	0.4	46.1±	0.9	53.3±	0.5	18.1±	0.1*	33.9±	0.4	957±	17*
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

(HCL070)

BAIS 8

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
MEASURE. TIME : 1  
SEX : MALE

HEMATOLOGY (SUMMARY)  
ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	RETICULOCYTE ‰		PROTHROMBIN TIME s e c		APTT s e c	
Control	5	19±	2	13.4±	0.5	22.5±	1.2
50ppm	5	19±	8	14.2±	1.7	23.9±	2.5
100ppm	5	24±	9	13.6±	0.5	23.6±	1.6
200ppm	5	25±	5	13.7±	1.0	22.7±	1.5
400ppm	5	17±	3	13.7±	0.7	24.2±	7.9
800ppm	0	-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : MALE

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	WBC 10 <sup>3</sup> /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	5	3.66±	1.04	0±	0	22±	8	0±	1	0±	0	2±	1	76±	8	0±	0
50ppm	5	3.97±	1.86	0±	0	19±	7	1±	1	0±	0	2±	1	78±	9	0±	0
100ppm	5	3.85±	0.57	0±	0	16±	3	1±	1	0±	0	3±	1	80±	4	0±	0
200ppm	5	4.27±	0.80	0±	0	16±	3	0±	1	0±	0	2±	1	82±	2	0±	0
400ppm	5	4.22±	1.27	0±	0	17±	4	0±	1	0±	0	2±	1	80±	5	0±	0
800ppm	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Test of Dunnett

(HCL070)

BAIS 8



## APPENDIX C 2

### HEMATOLOGY : SUMMARY, RAT : FEMALE (2-WEEK STUDY)

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : FEMALE

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	RED BLOOD CELL 10 <sup>6</sup> /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 <sup>3</sup> /μl	
Control	5	8.85±	0.33	16.4±	0.6	47.0±	1.5	53.1±	0.4	18.6±	0.1	35.0±	0.3	848±	78
50ppm	5	8.84±	0.28	16.6±	0.4	47.0±	1.0	53.3±	0.6	18.7±	0.1	35.1±	0.2	883±	37
100ppm	5	8.70±	0.30	16.3±	0.6	46.4±	1.5	53.4±	0.4	18.7±	0.1	35.0±	0.3	950±	56*
200ppm	5	8.60±	0.35	16.1±	0.4	46.2±	1.9	53.7±	0.7	18.7±	0.3	34.9±	0.5	976±	71**
400ppm	5	8.72±	0.22	16.1±	0.4	46.6±	1.0	53.4±	0.4	18.5±	0.2	34.6±	0.3	932±	39
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
MEASURE. TIME : 1  
SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)  
ALL ANIMALS ( 3W)

PAGE : 5

Group Name	NO. of Animals	RETICULOCYTE %		PROTHROMBIN TIME s e c		APTT s e c	
Control	5	16±	6	13.3±	0.4	19.7±	1.3
50ppm	5	17±	5	13.3±	0.3	17.3±	1.6
100ppm	5	16±	5	12.8±	0.4	17.0±	2.7
200ppm	5	16±	5	13.5±	0.4	17.8±	1.9
400ppm	5	18±	6	13.3±	0.9	18.3±	1.4
800ppm	0	-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : FEMALE

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 6

Group Name	NO. of Animals	WBC 10 <sup>3</sup> /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	5	3.12±	0.26	0±	1	22±	7	2±	1	0±	0	2±	1	74±	7	0±	0
50ppm	5	2.68±	1.40	0±	0	19±	3	0±	0*	0±	0	2±	1	79±	3	0±	0
100ppm	5	3.50±	1.94	0±	1	17±	4	2±	1	0±	0	2±	1	79±	4	0±	0
200ppm	5	3.53±	0.87	0±	0	18±	3	1±	1	0±	0	1±	1	80±	4	0±	0
400ppm	5	2.98±	0.87	0±	0	16±	4	2±	1	0±	0	2±	2	80±	3	0±	0
800ppm	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

\*\* :  $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 3

## APPENDIX D 1

BIOCHEMISTRY : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
MEASURE. TIME : 1  
SEX : MALE

BIOCHEMISTRY (SUMMARY)  
ALL ANIMALS ( 3W)

REPORT TYPE : A1

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	5	5.5±	0.1	3.6±	0.1	1.9±	0.1	0.11±	0.01	132±	16	49±	3	26±	6
50ppm	5	5.5±	0.2	3.6±	0.1	1.8±	0.1	0.10±	0.01	138±	7	45±	3	27±	7
100ppm	5	5.5±	0.1	3.6±	0.0	1.8±	0.0	0.10±	0.01	135±	9	49±	6	26±	6
200ppm	5	5.7±	0.2	3.6±	0.1	1.8±	0.1	0.10±	0.01	132±	9	40±	5	17±	6
400ppm	5	6.0±	0.1**	3.9±	0.1**	1.9±	0.1	0.11±	0.01	134±	13	39±	9	22±	7
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : MALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
Control	5	91±	5	65±	3	33±	4	315±	63	636±	44	1±	1	230±	18
50ppm	5	83±	5	61±	2	30±	2	265±	79	654±	46	1±	1	214±	29
100ppm	5	85±	8	59±	4	30±	2	298±	85	675±	35	1±	1	232±	27
200ppm	5	70±	7**	61±	7	30±	2	228±	62	652±	32	1±	1	230±	78
400ppm	5	74±	11*	61±	3	29±	2	268±	59	583±	35	1±	1	183±	22
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

(HCL074)

BAIS 3

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : MALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

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	5	18.4±	1.3	0.4±	0.1	139±	1	4.6±	0.2	103±	1	10.0±	0.2	8.6±	1.1
50ppm	5	16.7±	1.2	0.4±	0.0	140±	1	4.5±	0.3	106±	1**	10.1±	0.1	8.9±	0.7
100ppm	5	17.7±	1.4	0.4±	0.1	140±	1	4.6±	0.3	107±	1**	10.2±	0.2	8.7±	0.8
200ppm	5	16.4±	1.0*	0.4±	0.0	139±	0	4.5±	0.3	110±	0**	10.2±	0.1*	8.8±	0.7
400ppm	5	14.6±	0.4**	0.4±	0.0	139±	1	4.3±	0.3	114±	1**	10.4±	0.2**	8.3±	0.4
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

(HCL074)

BAIS 3



## APPENDIX D 2

BIOCHEMISTRY : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
MEASURE. TIME : 1  
SEX : FEMALE

BIOCHEMISTRY (SUMMARY)  
ALL ANIMALS ( 3W)

REPORT TYPE : A1

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	5	5.5±	0.1	3.5±	0.0	1.8±	0.0	0.12±	0.01	125±	11	61±	11	18±	3
50ppm	5	5.5±	0.1	3.6±	0.1	1.8±	0.1	0.13±	0.01	131±	7	69±	6	15±	4
100ppm	5	5.5±	0.1	3.5±	0.1	1.8±	0.1	0.12±	0.01	126±	15	70±	4	16±	3
200ppm	5	5.6±	0.1	3.6±	0.1	1.8±	0.1	0.12±	0.01	126±	11	70±	13	15±	2
400ppm	5	5.8±	0.1**	3.8±	0.0	1.9±	0.1	0.12±	0.01	115±	11	68±	2	20±	5
800ppm	0	-		-		-		-		-		-		-	

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

\*\* :  $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 3

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
Control	5	112±	18	66±	4	30±	4	373±	117	573±	17	2±	1	234±	44
50ppm	5	118±	8	68±	3	30±	1	428±	56	541±	40	1±	0	233±	22
100ppm	5	120±	7	62±	6	27±	2	366±	66	496±	32**	2±	1	213±	34
200ppm	5	115±	17	63±	5	27±	1	417±	110	483±	27**	1±	1	223±	41
400ppm	5	114±	5	61±	6	26±	2*	394±	73	433±	22**	1±	1	196±	19
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 MEASURE. TIME : 1  
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS ( 3W)

REPORT TYPE : A1

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	5	18.3±	1.1	0.4±	0.1	138±	1	4.4±	0.4	105±	0	9.8±	0.2	7.8±	0.7
50ppm	5	17.5±	0.8	0.4±	0.1	139±	0	4.4±	0.3	107±	1*	9.8±	0.1	7.4±	1.1
100ppm	5	17.0±	1.0	0.4±	0.0	139±	1	4.2±	0.1	109±	1**	10.0±	0.2	7.7±	1.1
200ppm	5	16.2±	1.9	0.4±	0.0	139±	1	4.5±	0.4	113±	2**	10.2±	0.2**	7.9±	1.1
400ppm	5	13.5±	1.4**	0.4±	0.0	138±	1	4.4±	0.3	117±	2**	10.1±	0.1*	7.8±	0.8
800ppm	0	-		-		-		-		-		-		-	

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

Test of Dunnett

(HCL074)

BAIS 3

## APPENDIX E 1

GROSS FINDINGS : SUMMARY, RAT : MALE

DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name	Control		50ppm		100ppm		200ppm	
		NO. of Animals	0	(%)	0	(%)	0	(%)	0	(%)
lung	red zone		-	( -)	-	( -)	-	( -)	-	( -)
liver	herniation		-	( -)	-	( -)	-	( -)	-	( -)
adrenal	red		-	( -)	-	( -)	-	( -)	-	( -)

(HPT080)

BAIS 3

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name		400ppm		800ppm	
		NO. of Animals		0	(%)	5	(%)
lung	red zone			-	( -)	2	( 40)
liver	herniation			-	( -)	1	( 20)
adrenal	red			-	( -)	2	( 40)

(HPT080)

BAIS 3

## APPENDIX E 2

GROSS FINDINGS : SUMMARY, RAT : MALE

SACRIFICED ANIMALS

(2-WEEK STUDY)



STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS ( 3W)

PAGE : 1

Organ	Findings	Group Name	Control		50ppm		100ppm		200ppm	
		NO. of Animals	5	(%)	5	(%)	5	(%)	5	(%)
liver	herniation		0	( 0)	0	( 0)	1	( 20)	0	( 0)

(HPT080)

BAIS 3

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS ( 3W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	400ppm	800ppm
			5 (%)	0 (%)
liver	herniation		0 ( 0)	- ( -)

(HPT080)

BAIS 3

## APPENDIX E 3

GROSS FINDINGS : SUMMARY, RAT : FEMALE

DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 3

Organ	Findings	Group Name	Control	50ppm	100ppm	200ppm
		NO. of Animals	0 (%)	0 (%)	0 (%)	0 (%)
liver	herniation		- ( -)	- ( -)	- ( -)	- ( -)

(HPT080)

BAIS 3

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	400ppm 0 (%)	800ppm 5 (%)
liver	herniation		- ( -)	1 ( 20)

(HPT080)

BAIS 3

## APPENDIX E 4

GROSS FINDINGS : SUMMARY, RAT : FEMALE

SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS ( 3W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		50ppm		100ppm		200ppm	
			5	(%)	5	(%)	5	(%)	5	(%)
liver	herniation		0	( 0)	2	( 40)	0	( 0)	0	( 0)

(HPT080)

BAIS 3

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS ( 3W)

PAGE : 4

Organ	Findings	Group Name		400ppm		800ppm	
		NO. of Animals		5 (%)		0 (%)	
liver	herniation			0 ( 0)		- ( -)	

(HPT080)

BAIS 3



## APPENDIX F 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight		THYMUS		ADRENALS		OVARIES		HEART		LUNGS	
Control	5	101±	4	0.266±	0.015	0.057±	0.009	0.080±	0.005	0.481±	0.047	0.573±	0.022
50ppm	5	102±	2	0.263±	0.021	0.057±	0.003	0.076±	0.012	0.466±	0.026	0.582±	0.021
100ppm	5	103±	4	0.252±	0.030	0.057±	0.001	0.077±	0.015	0.473±	0.033	0.598±	0.041
200ppm	5	103±	4	0.264±	0.019	0.054±	0.006	0.076±	0.013	0.475±	0.019	0.593±	0.025
400ppm	5	97±	4	0.215±	0.013**	0.054±	0.004	0.083±	0.016	0.485±	0.021	0.584±	0.031
800ppm	0	-		-		-		-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	KIDNEYS		SPLEEN		LIVER		BRAIN	
Control	5	0.936±	0.053	0.276±	0.024	3.186±	0.195	1.573±	0.019
50ppm	5	0.942±	0.043	0.271±	0.014	3.350±	0.067	1.584±	0.048
100ppm	5	0.967±	0.031	0.286±	0.024	3.612±	0.240*	1.593±	0.030
200ppm	5	1.021±	0.064	0.296±	0.018	3.860±	0.178**	1.579±	0.034
400ppm	5	1.039±	0.061*	0.265±	0.015	4.074±	0.295**	1.558±	0.029
800ppm	0	-		-		-		-	

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

Test of Dunnett

(HCL040)

BAIS 3

## APPENDIX F 2

ORGAN WEIGHT, ABSOLUTE : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE  
UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight		THYMUS		ADRENALS		TESTES		HEART		LUNGS	
Control	5	130±	8	0.268±	0.008	0.049±	0.003	2.088±	0.205	0.574±	0.048	0.657±	0.028
50ppm	5	137±	8	0.260±	0.018	0.047±	0.007	2.231±	0.048	0.603±	0.039	0.693±	0.039
100ppm	5	137±	9	0.289±	0.004	0.044±	0.002	2.151±	0.306	0.605±	0.048	0.706±	0.031
200ppm	5	139±	7	0.284±	0.007	0.047±	0.005	2.244±	0.128	0.615±	0.025	0.713±	0.011*
400ppm	5	125±	10	0.230±	0.036	0.049±	0.008	2.137±	0.148	0.593±	0.039	0.655±	0.046
800ppm	0	-		-		-		-		-		-	

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

Test of Dunnett

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE  
UNIT: g

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

PAGE : 2

Group Name	NO. of Animals	KIDNEYS		SPLEEN		LIVER		BRAIN	
Control	5	1.099±	0.072	0.391±	0.029	3.890±	0.214	1.618±	0.027
50ppm	5	1.191±	0.088	0.335±	0.028	4.527±	0.285*	1.645±	0.030
100ppm	5	1.184±	0.112	0.350±	0.016	4.647±	0.386*	1.665±	0.052
200ppm	5	1.274±	0.089*	0.367±	0.025	5.084±	0.406**	1.678±	0.038
400ppm	5	1.239±	0.055	0.311±	0.032	5.006±	0.489**	1.626±	0.029
800ppm	0	-		-		-		-	

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

Test of Dunnett

(HCL040)

BAIS 3

## APPENDIX G 1

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE  
UNIT: %

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

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	130± 8	0.208± 0.017	0.038± 0.003	1.608± 0.113	0.442± 0.009	0.507± 0.024
50ppm	5	137± 8	0.189± 0.012	0.034± 0.006	1.627± 0.073	0.439± 0.006	0.505± 0.027
100ppm	5	137± 9	0.212± 0.015	0.032± 0.004	1.569± 0.144	0.443± 0.016	0.518± 0.035
200ppm	5	139± 7	0.204± 0.008	0.033± 0.004	1.612± 0.095	0.442± 0.018	0.513± 0.024
400ppm	5	125± 10	0.185± 0.023	0.039± 0.005	1.718± 0.081	0.477± 0.017**	0.526± 0.013
800ppm	0	-	-	-	-	-	-

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

Test of Dunnett

(HCL042)

BAIS 3



STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE  
 UNIT: %

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

PAGE : 2

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.846± 0.015	0.254± 0.006	2.998± 0.067	1.250± 0.071
50ppm	5	0.866± 0.024	0.244± 0.011	3.295± 0.071**	1.200± 0.067
100ppm	5	0.866± 0.032	0.257± 0.009	3.399± 0.063**	1.223± 0.083
200ppm	5	0.913± 0.019**	0.264± 0.018	3.643± 0.107**	1.205± 0.038
400ppm	5	0.997± 0.043**	0.249± 0.009	4.013± 0.078**	1.312± 0.119
800ppm	0	-	-	-	-

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

Test of Dunnett

(HCL042)

BAIS 3

## APPENDIX G 2

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: %

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

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)		THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	101±	4	0.263± 0.017	0.056± 0.008	0.079± 0.006	0.475± 0.050	0.567± 0.011
50ppm	5	102±	2	0.258± 0.017	0.056± 0.002	0.074± 0.012	0.458± 0.029	0.570± 0.018
100ppm	5	103±	4	0.245± 0.025	0.055± 0.003	0.075± 0.012	0.460± 0.018	0.583± 0.022
200ppm	5	103±	4	0.256± 0.014	0.052± 0.006	0.074± 0.010	0.461± 0.012	0.575± 0.010
400ppm	5	97±	4	0.223± 0.019*	0.056± 0.002	0.086± 0.018	0.501± 0.013	0.603± 0.011**
800ppm	0	-		-	-	-	-	-

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

Test of Dunnett

(HCL042)

BAIS 3

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.925 ± 0.031	0.272 ± 0.017	3.147 ± 0.078	1.556 ± 0.080
50ppm	5	0.923 ± 0.036	0.266 ± 0.017	3.284 ± 0.035	1.553 ± 0.037
100ppm	5	0.943 ± 0.013	0.278 ± 0.015	3.518 ± 0.122**	1.554 ± 0.061
200ppm	5	0.992 ± 0.043*	0.287 ± 0.017	3.748 ± 0.053**	1.534 ± 0.034
400ppm	5	1.074 ± 0.030**	0.273 ± 0.009	4.205 ± 0.125**	1.612 ± 0.053
800ppm	0	-	-	-	-

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

Test of Dunnett

(HCL042)

BAIS 3

## APPENDIX H 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

RAT : MALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade				Control 0				50ppm 0				100ppm 0				200ppm 0			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit	necrosis:olfactory epithelium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	degeneration:respiratory epithelium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
trachea	necrosis:epithelium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
lung	congestion	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hemorrhage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	necrosis:epithelium, bronchus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Digestive system}																					
liver	herniation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade				400ppm 0				800ppm 5			
		1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}													
nasal cavit		< 0>				< 5>							
	necrosis:olfactory epithelium	-	-	-	-	0	0	4	1	( 0)	( 0)	( 80)	( 20)
		( -)	( -)	( -)	( -)	( 0)	( 0)	( 80)	( 20)				
	degeneration:respiratory epithelium	-	-	-	-	4	1	0	0	( 80)	( 20)	( 0)	( 0)
		( -)	( -)	( -)	( -)	( 80)	( 20)	( 0)	( 0)				
trachea		< 0>				< 5>							
	necrosis:epithelium	-	-	-	-	4	0	0	0	( 80)	( 0)	( 0)	( 0)
		( -)	( -)	( -)	( -)	( 80)	( 0)	( 0)	( 0)				
lung		< 0>				< 5>							
	congestion	-	-	-	-	5	0	0	0	(100)	( 0)	( 0)	( 0)
		( -)	( -)	( -)	( -)	(100)	( 0)	( 0)	( 0)				
	hemorrhage	-	-	-	-	1	0	0	0	( 20)	( 0)	( 0)	( 0)
		( -)	( -)	( -)	( -)	( 20)	( 0)	( 0)	( 0)				
	necrosis:epithelium, bronchus	-	-	-	-	5	0	0	0	(100)	( 0)	( 0)	( 0)
		( -)	( -)	( -)	( -)	(100)	( 0)	( 0)	( 0)				
{Digestive system}													
liver		< 0>				< 5>							
	herniation	-	-	-	-	1	0	0	0	( 20)	( 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 : Number of animals with lesion  
( c ) c : b / a \* 100

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade	Control 0				50ppm 0				100ppm 0				200ppm 0			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver	necrosis:central		< 0>				< 0>				< 0>				< 0>			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
	degeneration:central		< 0>				< 0>				< 0>				< 0>			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
{Urinary system}																		
kidney	necrosis:proximal tubule strai		< 0>				< 0>				< 0>				< 0>			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
{Endocrine system}																		
adrenal	hemorrhage		< 0>				< 0>				< 0>				< 0>			
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
	necrosis:cortex		< 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



STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 4

		Group Name		400ppm				800ppm			
		No. of Animals on Study		0				5			
Organ_____	Findings_____	Grade		1	2	3	4	1	2	3	4
				(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}											
liver		< 0>				< 5>					
	necrosis:central	-	-	-	-	2	0	0	0		
		( - )	( - )	( - )	( - )	( 40 )	( 0 )	( 0 )	( 0 )		
	degeneration:central	-	-	-	-	3	0	0	0		
		( - )	( - )	( - )	( - )	( 60 )	( 0 )	( 0 )	( 0 )		
{Urinary system}											
kidney		< 0>				< 5>					
	necrosis:proximal tubule strai	-	-	-	-	1	0	0	0		
		( - )	( - )	( - )	( - )	( 20 )	( 0 )	( 0 )	( 0 )		
{Endocrine system}											
adrenal		< 0>				< 5>					
	hemorrhage	-	-	-	-	1	0	0	0		
		( - )	( - )	( - )	( - )	( 20 )	( 0 )	( 0 )	( 0 )		
	necrosis:cortex	-	-	-	-	1	0	2	0		
		( - )	( - )	( - )	( - )	( 20 )	( 0 )	( 40 )	( 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

## APPENDIX H 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

RAT : MALE: SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 SACRIFICED ANIMALS ( 3W)

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade	Control				50ppm				100ppm				200ppm			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	goblet cell hyperplasia		< 5>				< 5>				< 5>				< 5>			
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
{Digestive system}																		
liver	herniation		< 5>				< 5>				< 5>				< 5>			
			0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
{Urinary system}																		
kidney	eosinophilic body		< 5>				< 5>				< 5>				< 5>			
			0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 40)	( 0)	( 0)	( 0)
	mineralization:papilla		< 5>				< 5>				< 5>				< 5>			
			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)	( 0)	( 0)	( 0)	( 0)
{Endocrine system}																		
pituitary	Rathke pouch		< 5>				< 5>				< 5>				< 5>			
			1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
 b b : Number of animals with lesion  
 ( c ) c : b / a \* 100

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 SACRIFICED ANIMALS ( 3W)

PAGE : 2

		Group Name	400ppm				800ppm			
		No. of Animals on Study	5				0			
Organ	Findings	Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 0>			
	goblet cell hyperplasia		3	0	0	0	-	-	-	-
			( 80)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)
{Digestive system}										
liver			< 5>				< 0>			
	herniation		0	0	0	0	-	-	-	-
			( 0)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)
{Urinary system}										
kidney			< 5>				< 0>			
	eosinophilic body		4	0	0	0	-	-	-	-
			( 80)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)
	mineralization:papilla		0	0	0	0	-	-	-	-
			( 0)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)
{Endocrine system}										
pituitary			< 5>				< 0>			
	Rathke pouch		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

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
SACRIFICED ANIMALS ( 3W)

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade	Control 5				50ppm 5				100ppm 5				200ppm 5			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
thyroid			< 5>				< 5>				< 5>				< 5>			
	ultimibranchial body remanet		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
{Reproductive system}																		
testis			< 5>				< 5>				< 5>				< 5>			
	multinuclear giant 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)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
prostate			< 5>				< 5>				< 5>				< 5>			
	inflammation		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
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																	

(HPT150)

BAIS3

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 SACRIFICED ANIMALS ( 3W)

PAGE : 4

		Group Name	400ppm				800ppm			
		No. of Animals on Study	5				0			
Organ	Findings	Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}										
thyroid			< 5>				< 0>			
	ultimibranhial body remanet		0	0	0	0	-	-	-	-
			( 0)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)
{Reproductive system}										
testis			< 5>				< 0>			
	multinuclear giant cell		1	0	0	0	-	-	-	-
			( 20)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)
prostate			< 5>				< 0>			
	inflammation		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

(HPT150)

BAIS3

## APPENDIX H 3

### HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

#### RAT : FEMALE : DEAD AND MORIBUND ANIMALS

#### (2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 5

		Group Name	Control				50ppm				100ppm				200ppm			
		No. of Animals on Study	0				0				0				0			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			< 0>				< 0>				< 0>				< 0>			
	necrosis:olfactory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
			< 0>				< 0>				< 0>				< 0>			
	degeneration:respiratory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
trachea			< 0>				< 0>				< 0>				< 0>			
	necrosis:epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
lung			< 0>				< 0>				< 0>				< 0>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
			< 0>				< 0>				< 0>				< 0>			
	necrosis:epithelium, bronchus		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
{Digestive system}																		
liver			< 0>				< 0>				< 0>				< 0>			
	herniation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )
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																	



STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 6

		Group Name	400ppm				800ppm			
		No. of Animals on Study	0				5			
Organ	Findings	Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 0>				< 5>			
	necrosis:olfactory epithelium		-	-	-	-	0	0	4	1
			( - )	( - )	( - )	( - )	( 0 )	( 0 )	( 80 )	( 20 )
	degeneration:respiratory epithelium		-	-	-	-	3	2	0	0
			( - )	( - )	( - )	( - )	( 60 )	( 40 )	( 0 )	( 0 )
trachea			< 0>				< 5>			
	necrosis:epithelium		-	-	-	-	4	0	0	0
			( - )	( - )	( - )	( - )	( 80 )	( 0 )	( 0 )	( 0 )
lung			< 0>				< 5>			
	congestion		-	-	-	-	5	0	0	0
			( - )	( - )	( - )	( - )	( 100 )	( 0 )	( 0 )	( 0 )
	necrosis:epithelium, bronchus		-	-	-	-	4	0	0	0
			( - )	( - )	( - )	( - )	( 80 )	( 0 )	( 0 )	( 0 )
{Digestive system}										
liver			< 0>				< 5>			
	herniation		-	-	-	-	1	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 : Number of animals with lesion  
 ( c ) c : b / a \* 100

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study				Control				50ppm				100ppm				200ppm			
		Grade				0				0				0				0			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Urinary system}

kidney	necrosis:proximal tubule strai	< 0>				< 0>				< 0>				< 0>				< 0>			
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )	( - )

{Endocrine system}

adrenal	necrosis:cortex	< 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

(HPT150)

BAIS3

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 8

		Group Name				400ppm				800ppm			
		No. of Animals on Study				0				5			
		Grade				1	2	3	4	1	2	3	4
Organ	Findings	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Urinary system}

kidney	necrosis:proximal tubule strai	< 0>				< 5>			
		-	-	-	-	1	0	4	0
		( - )	( - )	( - )	( - )	( 20 )	( 0 )	( 80 )	( 0 )

{Endocrine system}

adrenal	necrosis:cortex	< 0>				< 5>			
		-	-	-	-	1	2	0	0
		( - )	( - )	( - )	( - )	( 20 )	( 40 )	( 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

(HPT150)

BAIS3

## APPENDIX H 4

### HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

RAT : FEMALE: SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0379  
ANIMAL : RAT F344/DuCrj  
REPORT TYPE : A1  
SEX : FEMALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
SACRIFICED ANIMALS ( 3W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade	Control				50ppm				100ppm				200ppm			
			5				5				5				5			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Respiratory system}

nasal cavit	goblet cell hyperplasia	< 5>				< 5>				< 5>				< 5>			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

{Urinary system}

kidney	mineralization:cortico-medullary junction	< 5>				< 5>				< 5>				< 5>			
		1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
		( 20)	( 0)	( 0)	( 0)	( 40)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
< a > a : Number of animals examined at the site  
b b : Number of animals with lesion  
( c ) c : b / a \* 100

(HPT150)

BAIS3

STUDY NO. : 0379  
 ANIMAL : RAT F344/DuCrj  
 REPORT TYPE : A1  
 SEX : FEMALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 SACRIFICED ANIMALS ( 3W)

PAGE : 6

Organ	Findings	Group Name		400ppm				800ppm			
		No. of Animals on Study		5				0			
		Grade		1	2	3	4	1	2	3	4
				(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Respiratory system}

nasal cavit		< 5>				< 0>			
	goblet cell hyperplasia	2	0	0	0	-	-	-	-
		( 40)	( 0)	( 0)	( 0)	( -)	( -)	( -)	( -)

{Urinary system}

kidney		< 5>				< 0>			
	mineralization:cortico-medullary junction	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

(HPT150)

BAIS3

## APPENDIX I 1

### IDENTITY OF 1-BROMO-3-CHLOROPROPANE IN THE 2-WEEK INHALATION STUDY

IDENTITY AND IMPURITY OF 1-BROMO-3-CHLOROPROPANE IN THE 2-WEEK  
INHALATION STUDY

Test Substance : 1-Bromo-3-chloropropane (Wako Pure Chemical Industries, Ltd.)

Lot No. : CKR4612

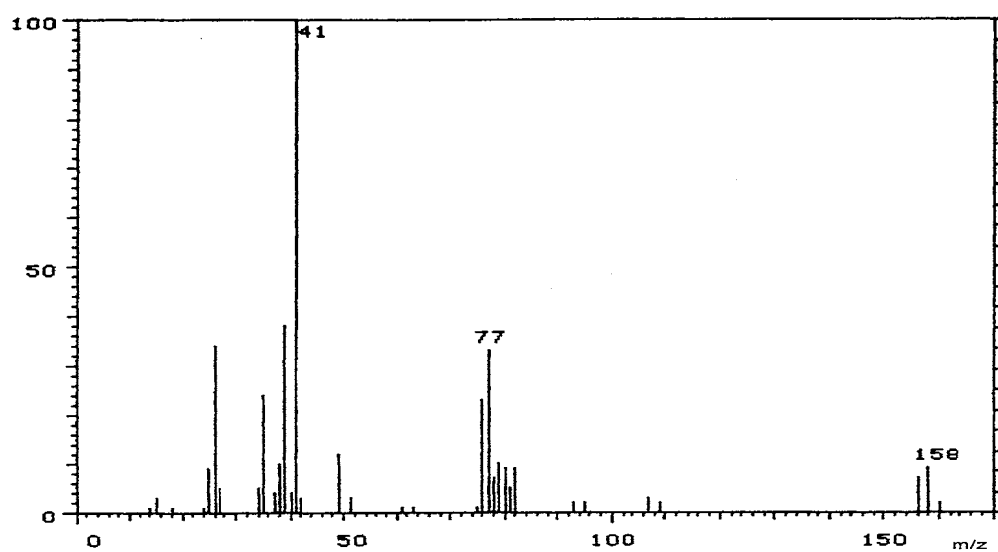
## 1. Spectral data

Mass Spectrometry

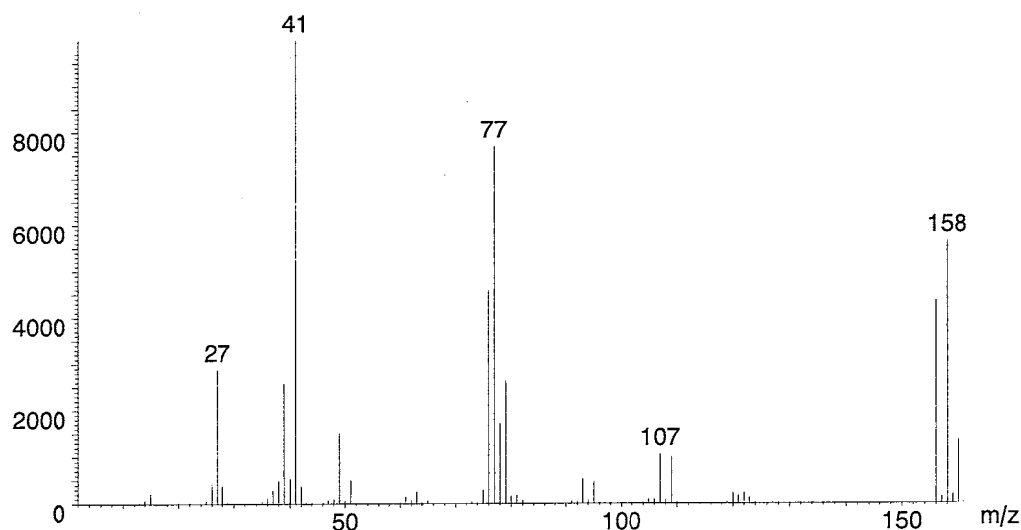
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data\*

Results: The mass spectrum was consistent with literature spectrum.

(\*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.  
John Wiley and Sons, Inc. (U.S.), Entry Number 41048)

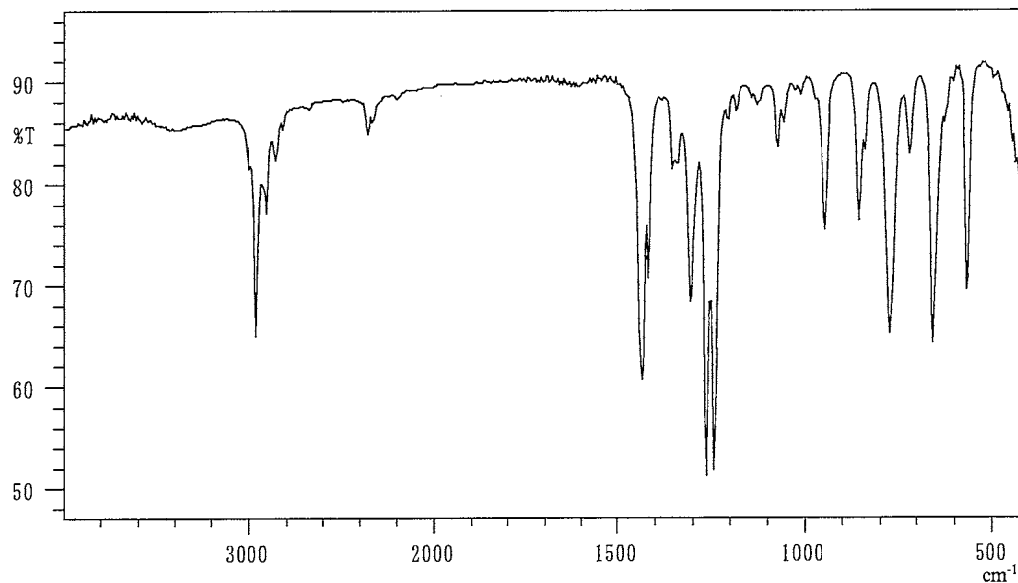


## Infrared Spectrometry

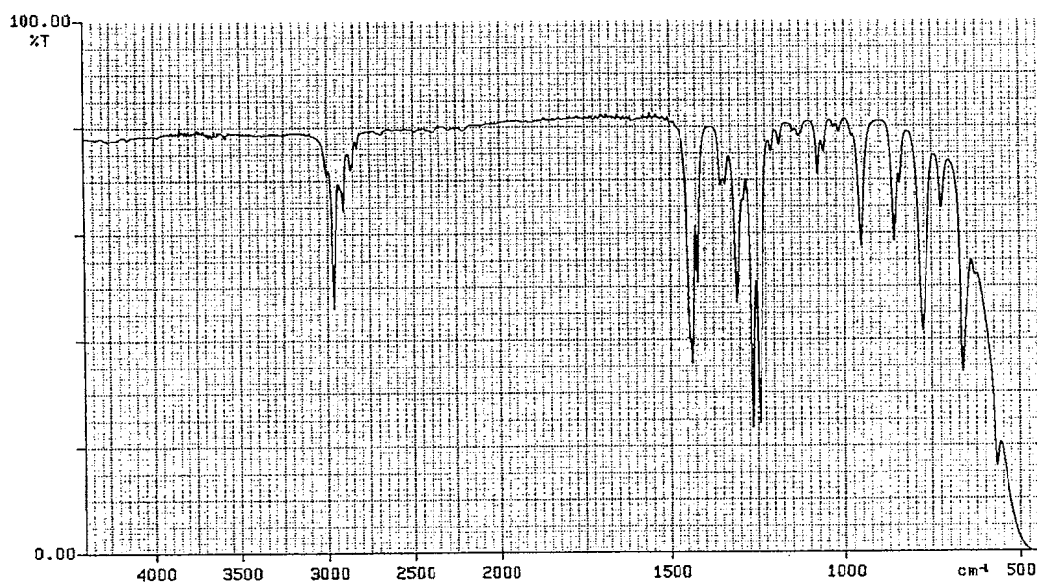
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution :  $4\text{ cm}^{-1}$



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data\*

Results: The infrared spectrum was consistent with literature spectrum.

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

2. Conclusions: The test substance was identified as 1-bromo-3-chloropropane, by the mass spectrum and the infrared spectrum.

## APPENDIX I 2

### STABILITY OF 1-BROMO-3-CHLOROPROPANE IN THE 2-WEEK INHALATION STUDY

## STABILITY OF 1-BROMO-3-CHLOROPROPANE IN THE 2-WEEK INHALATION STUDY

Test Substance : 1-Bromo-3-chloropropane (Wako Pure Chemical Industries, Ltd.)

Lot No. : CKR4612

1. Sample : This lot was used from 1999.3.10 to 1999.3.23. Test substance was stored at room temperature.

## 2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 20 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1  $\mu$ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1999.03.01	1	1.987	0.033
	2	6.956	99.967
1999.04.07	1	1.986	0.034
	2	6.961	99.966

Results: Gas chromatography indicated one major peak (peak No.2) and one impurity (peak No.1 < 0.1% of total area) analyzed at 1999.3.1 and one major peak (peak No.2) and one impurity (peak No.1 < 0.1% of total area) analyzed at 1999.4.7. No new trace impurity peak in the test substance analyzed at 1999.4.7 was detected.

3. Conclusions: The test substance was stable for about 1 month at room temperature.

## APPENDIX J 1

CONCENTRATION OF 1-BROMO-3-CHLOROPROPANE IN THE  
INHALATION CHAMBER OF THE 2-WEEK INHALATION STUDY

CONCENTRATION OF 1-BROMO-3-CHLOROPROPANE IN THE INHALATION CHAMBER  
OF THE 2-WEEK INHALATION STUDY

Group Name	Concentration(ppm)
	Mean $\pm$ S.D.
Control	0.0 $\pm$ 0.0
50ppm	50.1 $\pm$ 0.5
100ppm	100.6 $\pm$ 0.6
200ppm	200.5 $\pm$ 1.1
400ppm	400.3 $\pm$ 3.2
800ppm	804.0 $\pm$ 7.6

## APPENDIX J 2

### ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-WEEK INHALATION STUDY OF 1-BROMO-3-CHLOROPROPANE

# ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-WEEK INHALATION STUDY OF 1-BROMO-3-CHLOROPROPANE

Group Name	Temperature(°C) Mean ± S.D.	Humidity(%) Mean ± S.D.	Ventilation Rate(L/min) Mean ± S.D.	Air Change(time/h) Mean
Control	22.3 ± 0.2	57.1 ± 1.0	212.0 ± 1.3	12.0
50ppm	22.2 ± 0.2	57.4 ± 1.0	212.0 ± 1.7	12.0
100ppm	22.4 ± 0.1	55.8 ± 0.8	212.0 ± 1.2	12.0
200ppm	22.2 ± 0.2	57.4 ± 1.0	212.8 ± 1.3	12.0
400ppm	22.5 ± 0.2	56.2 ± 0.9	212.3 ± 1.2	12.0
800ppm	22.4 ± 0.4	56.0 ± 0.8	212.2 ± 0.5	12.0

## APPENDIX K 1

### METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK INHALATION STUDY OF 1-BROMO-3-CHLOROPROPANE



METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE  
2-WEEK INHALATION STUDY OF 1-BROMO-3-CHLOROPROPANE

Item	Method
<b>Hematology</b>	
Red blood cell (RBC)	Light scattering method <sup>1)</sup>
Hemoglobin (Hgb)	Cyanmethemoglobin method <sup>1)</sup>
Hematocrit (Hct)	Calculated as $RBC \times MCV/10$ <sup>1)</sup>
Mean corpuscular volume (MCV)	Light scattering method <sup>1)</sup>
Mean corpuscular hemoglobin (MCH)	Calculated as $Hgb/RBC \times 10$ <sup>1)</sup>
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as $Hgb/Hct \times 100$ <sup>1)</sup>
Platelet	Light scattering method <sup>1)</sup>
Reticulocyte	Pattern recognition method <sup>3)</sup> (New methyleneblue staining)
Prothrombin time	Quick one stage method <sup>2)</sup>
Activated partial thromboplastin time (APTT)	Ellagic acid activaterd method <sup>2)</sup>
White blood cell (WBC)	Light scattering method <sup>1)</sup>
Differential WBC	Pattern recognition method <sup>3)</sup> (Wright staining)
<b>Biochemistry</b>	
Total protein (TP)	Biuret method <sup>4)</sup>
Albumin (Alb)	BCG method <sup>4)</sup>
A/G ratio	Calculated as $Alb/(TP - Alb)$ <sup>4)</sup>
T-bilirubin	Alkaline azobilirubin method <sup>4)</sup>
Glucose	GlcK · G-6-PDH method <sup>4)</sup>
T-cholesterol	CE · COD · POD method <sup>4)</sup>
Triglyceride	LPL · GK · GPO · POD method <sup>4)</sup>
Phospholipid	PLD · ChOD · POD method <sup>4)</sup>
Glutamic oxaloacetic transaminase (GOT)	JSCC method <sup>4)</sup>
Glutamic pyruvic transaminase (GPT)	JSCC method <sup>4)</sup>
Lactate dehydrogenase (LDH)	SFBC method <sup>4)</sup>
Alkaline phosphatase (ALP)	GSCC method <sup>4)</sup>
$\gamma$ -Glutamyl transpeptidase ( $\gamma$ -GTP)	L- $\gamma$ -Glutamyl-p-nitroanilide method <sup>4)</sup>
Creatine phosphokinase (CPK)	JSCC method <sup>4)</sup>
Urea nitrogen	Urease · GLDH method <sup>4)</sup>
Creatinine	Jaffe method <sup>4)</sup>
Sodium	Ion selective electrode method <sup>4)</sup>
Potassium	Ion selective electrode method <sup>4)</sup>
Chloride	Ion selective electrode method <sup>4)</sup>
Calcium	OCPC method <sup>4)</sup>
Inorganic phosphorus	PNP · XOD · POD method <sup>4)</sup>

1) Automatic blood cell analyzer (Technicon H·1 : Bayer Corporation,USA)

2) Automatic coagulometer (Sysmex CA-5000 : Sysmex Corporation,Japan)

3) Automatic blood cell differential analyzer (MICROX HEG-120NA : OMRON Corporation,Japan)

4) Automatic analyzer (Hitachi 7070 : Hitachi,Ltd.,Japan)

## APPENDIX K 2

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY  
IN THE 2-WEEK INHALATION STUDY OF 1-BROMO-3-CHLOROPROPANE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY  
IN THE 2-WEEK INHALATION STUDY OF 1-BROMO-3-CHLOROPROPANE

Item	Unit	Decimal Place
<b>Hematology</b>		
Red blood cell (RBC)	$\times 10^6 / \mu\text{L}$	2
Hemoglobin	g/dL	1
Hematocrit	%	1
Mean corpuscular volume (MCV)	fL	1
Mean corpuscular hemoglobin (MCH)	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	g/dL	1
Platelet	$\times 10^3 / \mu\text{L}$	0
Reticulocyte	‰	0
Prothrombin time	sec	1
Activated partial thromboplastin time (APTT)	sec	1
White blood cell (WBC)	$\times 10^3 / \mu\text{L}$	2
Differential WBC	%	0
<b>Biochemistry</b>		
Total protein	g/dL	1
Albumin	g/dL	1
A/G ratio	—	1
T-bilirubin	mg/dL	2
Glucose	mg/dL	0
T-cholesterol	mg/dL	0
Triglyceride	mg/dL	0
Phospholipid	mg/dL	0
Glutamic oxaloacetic transminase (GOT)	IU/L	0
Glutamic pyruvic transaminase (GPT)	IU/L	0
Lactate dehydrogenase (LDH)	IU/L	0
Alkaline phosphatase (ALP)	IU/L	0
$\gamma$ -Glutamyl transpeptidase ( $\gamma$ -GTP)	IU/L	0
Creatine phosphokinase (CPK)	IU/L	0
Urea nitrogen	mg/dL	1
Creatinine	mg/dL	1
Sodium	mEq/L	0
Potassium	mEq/L	1
Chloride	mEq/L	0
Calcium	mg/dL	1
Inorganic phosphorus	mg/dL	1