o－クロロニトロベンゼンのマウスを用いた
経口投与による 2 週間毒性試験（混餌試験）報告書

試験番号：　０４３４

APPENDIXES

APPENDIXES

APPENDIXES (CONTINUED)

APPENDIXES (CONTINUED)

APPENDIX A 1

CLINICAL OBSERVATION : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-3	1-7	2-3	2-7
DEATH	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	0	1	2
HUNCHBACK POSITION	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	0	1	0
ATAXIC GAIT	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	0	0	2
YELLOW URINE	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	5	5	5
	2500 ppm	0	5	5	5
	5000 ppm	0	5	5	5
	10000 ppm	0	5	4	3
SMALL STOOL	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	1	0	0
OLIGO-STOOL	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	1	1	3

APPENDIX A 2

CLINICAL OBSERVATION : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

Clinical sign	Group Name	Administration Week-day 1-3	1-7	2-3	2-7
DEATH	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	0	2	2
HUNCHBACK POSITION	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	0	0	1
YELLOW URINE	Control	0	0	0	0
	625 ppm	0	5	5	5
	1250 ppm	0	5	5	5
	2500 ppm	0	5	5	5
	5000 ppm	0	5	5	5
	10000 ppm	0	5	3	3
SMALL STOOL	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	3	0	0
OLIGO-STOOL	Control	0	0	0	0
	625 ppm	0	0	0	0
	1250 ppm	0	0	0	0
	2500 ppm	0	0	0	0
	5000 ppm	0	0	0	0
	10000 ppm	0	0	0	3

APPENDIX B 1

BODY WEIGHT CHANGES : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-3	1-7	2-3	2-7
Control	23.4± 1.0	23.6± 1.2	24.4± 1.1	25.1± 0.8	25.7± 0.8
625 ppm	23.4± 0.9	23.7± 1.1	24.1± 1.2	24.7± 1.6	25.4± 1.4
1250 ppm	23.3± 1.0	23.3± 0.9	24.1± 0.9	24.8± 1.0	25.7± 1.1
2500 ppm	23.3± 1.2	22.2± 1.1	24.1± 1.3	24.7± 1.3	25.6± 1.1
5000 ppm	23.4± 0.9	19.7± 0.7**	21.9± 0.9**	22.9± 1.0*	23.5± 0.8*
10000 ppm	23.3± 1.0	17.5± 0.8**	17.2± 0.4**	16.6± 0.8**	15.6± 0.8**

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

APPENDIX B 2

BODY WEIGHT CHANGES : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-3	1-7	2-3	2-7
Control	18.7± 0.8	18.6± 1.2	18.7± 1.3	18.9± 1.0	19.4± 0.6
625 ppm	18.7± 0.8	19.1± 0.5	19.8± 0.6	19.8± 0.4	20.3± 0.8
1250 ppm	18.7± 0.8	18.9± 0.7	19.6± 0.9	19.8± 0.7	20.3± 0.6
2500 ppm	18.8± 0.9	18.8± 0.7	20.4± 0.6**	20.3± 0.8*	21.1± 0.9**
5000 ppm	18.8± 0.7	16.6± 0.7**	19.2± 0.5	19.6± 0.5	20.8± 0.7*
10000 ppm	18.7± 0.7	13.8± 0.7**	13.7± 0.5**	13.3± 0.5**	13.2± 0.4**

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

APPENDIX C 1

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-3 (3)	1-7 (4)	2-3 (3)	2-7 (4)
Control	3.6 ± 0.5	4.1 ± 0.2	3.7 ± 0.4	4.0 ± 0.3
625 ppm	3.9 ± 0.3	4.1 ± 0.2	3.8 ± 0.3	4.3 ± 0.3
1250 ppm	3.4 ± 0.2	4.3 ± 0.1	3.8 ± 0.2	4.3 ± 0.3
2500 ppm	2.7 ± 0.4 **	4.7 ± 0.1 **	3.6 ± 0.5	4.0 ± 0.3
5000 ppm	1.5 ± 0.4 **	3.9 ± 0.2	3.2 ± 0.3	3.6 ± 0.3
10000 ppm	0.5 ± 0.3 **	1.9 ± 0.3 **	0.9 ± 0.6 **	1.5 ± 0.3 **

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

APPENDIX C 2

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-3 (3)	1-7 (4)	2-3 (3)	2-7 (4)
Control	3.2 ± 0.2	3.7 ± 0.3	3.3 ± 0.2	3.8 ± 0.2
625 ppm	3.4 ± 0.1	3.7 ± 0.1	3.4 ± 0.1	3.8 ± 0.2
1250 ppm	3.1 ± 0.2	3.8 ± 0.2	3.3 ± 0.1	3.8 ± 0.1
2500 ppm	2.8 ± 0.3 *	3.9 ± 0.1	3.2 ± 0.2	3.5 ± 0.2
5000 ppm	1.8 ± 0.4 **	3.6 ± 0.2	2.7 ± 0.2 **	3.3 ± 0.3 *
10000 ppm	0.7 ± 0.3 **	2.3 ± 0.4 **	1.7 ± 0.1 **	1.6 ± 0.4 **

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

APPENDIX D 1

CHEMICAL INTAKE CHANGES : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
UNIT : g/kg/day
REPORT TYPE : A1 2
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 1-3	1-7	2-3	2-7
Control	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000
625 ppm	0.103 ± 0.005	0.107 ± 0.004	0.097 ± 0.003	0.105 ± 0.004
1250 ppm	0.181 ± 0.008	0.222 ± 0.004	0.194 ± 0.007	0.207 ± 0.009
2500 ppm	0.305 ± 0.044	0.488 ± 0.021	0.369 ± 0.042	0.390 ± 0.024
5000 ppm	0.374 ± 0.083	0.901 ± 0.057	0.704 ± 0.050	0.764 ± 0.059
10000 ppm	0.268 ± 0.153	1.083 ± 0.189	0.653 ± 0.305	0.980 ± 0.153

APPENDIX D 2

CHEMICAL INTAKE CHANGES : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
UNIT : g/kg/day
REPORT TYPE : A1 2
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 1-3	1-7	2-3	2-7
Control	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000	0.000 ± 0.000
625 ppm	0.110 ± 0.002	0.117 ± 0.001	0.107 ± 0.004	0.117 ± 0.004
1250 ppm	0.203 ± 0.010	0.240 ± 0.011	0.209 ± 0.010	0.235 ± 0.009
2500 ppm	0.367 ± 0.035	0.480 ± 0.024	0.389 ± 0.017	0.414 ± 0.017
5000 ppm	0.532 ± 0.134	0.944 ± 0.037	0.698 ± 0.041	0.803 ± 0.050
10000 ppm	0.487 ± 0.176	1.666 ± 0.295	1.250 ± 0.064	1.196 ± 0.336

APPENDIX E 1

HEMATOLOGY : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu l$	HEMOGLOBIN a) g/dl	HEMATOCRIT %	MCV fl	MCH a) pg	MCHC a) g/dl	PLATELET $10^3/\mu l$
Control	5	10.24± 0.42	15.2± 0.7	48.4± 1.9	47.3± 0.7	14.8± 0.2	31.4± 0.4	1257± 49
625 ppm	5	10.10± 0.48	15.0± 0.6	47.6± 2.2	47.2± 0.8	14.7± 0.1	31.3± 0.4	1172± 72
1250 ppm	5	9.63± 0.36	14.9± 0.2	45.2± 1.9	46.9± 0.7	15.5± 0.4	33.1± 0.9	1246± 55
2500 ppm	5	9.30± 0.28*	17.1± 0.8	44.9± 2.8	48.3± 3.3	18.4± 0.5	38.1± 1.8	1220± 196
5000 ppm	5	9.54± 0.29	18.7± 0.7	49.7± 1.4	52.1± 1.2	19.6± 0.5	37.8± 1.5	1028± 47
10000 ppm	3	7.50± 0.99**	18.8± 1.9	29.8± 1.6	40.3± 5.0	25.1± 0.9	62.7± 5.0	1030± 443

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

a) ; Statistical analysis did not applied.

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	WBC $10^3/\mu l$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	5	1.96± 0.73	0± 1	14± 4	2± 1	0± 0	1± 0	83± 5	0± 0
625 ppm	5	1.58± 0.90	1± 1	15± 4	2± 1	0± 0	2± 2	80± 6	0± 0
1250 ppm	5	2.06± 0.47	2± 1	10± 2	2± 1	0± 0	2± 2	85± 3	0± 0
2500 ppm	5	2.24± 0.84	1± 1	14± 3	1± 1	0± 0	2± 1	82± 5	0± 0
5000 ppm	5	3.03± 1.53	2± 1	16± 3	1± 1	0± 0	3± 1	77± 5	0± 0
10000 ppm	3	7.10± 0.94**	5± 5	71± 5**	1± 2	0± 0	3± 1	18± 2**	1± 0

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

APPENDIX E 2

HEMATOLOGY : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu l$	HEMOGLOBIN a) g/dl	HEMATOCRIT %	MCV fl	MCH a) pg	MCHC a) g/dl	PLATELET $10^3/\mu l$
Control	5	9.95± 0.26	15.0± 0.3	47.5± 0.9	47.8± 0.7	15.2± 0.3	31.7± 0.3	1051± 23
625 ppm	5	9.88± 0.12	15.0± 0.4	46.8± 0.5	47.4± 0.4	15.1± 0.2	31.9± 0.5	1032± 61
1250 ppm	5	9.26± 0.19**	14.6± 0.4	44.8± 1.3**	48.3± 0.5	15.8± 0.2	32.8± 0.5	1099± 81
2500 ppm	5	8.67± 0.14**	14.7± 0.5	43.8± 1.0**	50.5± 1.3	17.0± 0.4	33.7± 1.1	1100± 120
5000 ppm	5	8.91± 0.22**	16.8± 0.9	46.8± 1.7	52.5± 1.0*	18.9± 0.8**	36.0± 1.1**	1048± 66
10000 ppm	3	5.38± 0.37**	10.7± 2.0	32.8± 1.8**	61.1± 2.5**	19.9± 2.5**	32.6± 5.1	928± 103

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

a) ; Statistical analysis did not applied.

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	WBC $10^3/\mu l$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	5	2.08± 0.44	2± 1	11± 3	1± 1	0± 0	1± 1	84± 4	0± 0
625 ppm	5	2.28± 0.38	1± 1	11± 3	2± 1	0± 0	2± 1	84± 3	0± 0
1250 ppm	5	2.26± 1.13	1± 1	10± 2	2± 1	0± 0	1± 1	85± 1	0± 0
2500 ppm	5	2.75± 0.86	1± 1	9± 1	1± 1	0± 0	2± 1	88± 2	0± 0
5000 ppm	5	2.38± 0.39	2± 1	12± 4	1± 0	0± 0	3± 1	82± 5	0± 0
10000 ppm	3	3.81± 1.84	8± 4	68± 13	0± 0	0± 0	1± 2	23± 9	0± 0

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

APPENDIX F 1

BIOCHEMISTRY : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (2W)

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		PHOSPHOLIPID mg/dl	
Control	5	4.8±	0.1	2.9±	0.1	1.5±	0.1	0.15±	0.02	322±	16	93±	7	204±	10
625 ppm	5	4.8±	0.1	2.9±	0.1	1.5±	0.1	0.15±	0.01	303±	27	122±	11	246±	13
1250 ppm	5	5.0±	0.1	3.0±	0.1	1.6±	0.1	0.18±	0.01	295±	26	160±	7	292±	11
2500 ppm	5	5.3±	0.1**	3.2±	0.1**	1.5±	0.1	0.20±	0.01	281±	26	226±	23**	374±	31**
5000 ppm	5	5.6±	0.1**	3.5±	0.1**	1.6±	0.1*	0.33±	0.02**	233±	16**	340±	43**	519±	45**
10000 ppm	3	5.6±	0.1**	3.6±	0.1**	1.8±	0.1**	0.88±	0.33**	61±	68**	201±	16	281±	40

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	GOT IU/ℓ		GPT IU/ℓ		LDH IU/ℓ		G-GTP IU/ℓ		CPK IU/ℓ		UREA NITROGEN mg/dℓ		SODIUM mEq/ℓ	
Control	5	31±	2	18±	1	185±	18	1±	1	61±	18	23.0±	4.6	149±	2
625 ppm	5	28±	2	22±	3	171±	12	1±	1	72±	24	24.3±	2.5	149±	1
1250 ppm	5	29±	2	27±	4	187±	32	1±	0	52±	12	23.0±	3.1	150±	2
2500 ppm	5	34±	8	46±	18*	254±	58	2±	0	74±	25	20.1±	7.6	151±	2
5000 ppm	5	52±	5	94±	12**	423±	53*	17±	1	80±	22	20.8±	1.5	151±	1
10000 ppm	3	689±	549	877±	716**	11703±	7593*	12±	6	941±	660*	45.1±	25.2	152±	2

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	5	4.8±	0.6	118±	1	9.1±	0.1	9.1±	1.7
625 ppm	5	4.8±	0.2	118±	2	9.2±	0.1	8.5±	1.8
1250 ppm	5	4.6±	0.2	117±	2	9.4±	0.2	8.4±	1.4
2500 ppm	5	4.5±	0.3	115±	2	9.7±	0.2**	8.7±	0.6
5000 ppm	5	5.1±	0.6	113±	1*	9.5±	0.2**	9.1±	2.1
10000 ppm	3	6.0±	0.2**	116±	6	10.1±	0.1**	7.8±	2.2

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

APPENDIX F 2

BIOCHEMISTRY : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (2W)

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	PHOSPHOLIPID mg/dl
Control	5	4.7± 0.0	3.0± 0.1	1.8± 0.1	0.17± 0.01	280± 33	74± 5	163± 14
625 ppm	5	4.8± 0.1	3.1± 0.1	1.9± 0.1	0.17± 0.03	261± 19	112± 13	218± 20
1250 ppm	5	5.0± 0.3	3.2± 0.2	1.8± 0.2	0.19± 0.03	257± 17	136± 11	241± 17
2500 ppm	5	5.1± 0.1	3.2± 0.1	1.7± 0.1	0.21± 0.01	257± 8	204± 13*	322± 6*
5000 ppm	5	5.5± 0.2**	3.6± 0.1**	1.8± 0.2	0.26± 0.04**	226± 18**	318± 31**	486± 56**
10000 ppm	3	5.8± 0.2**	4.0± 0.4**	2.3± 0.4*	0.65± 0.15**	85± 29**	244± 7**	345± 22*

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	GOT IU/ℓ		GPT IU/ℓ		LDH IU/ℓ		G-GTP IU/ℓ		CPK IU/ℓ		UREA NITROGEN mg/dℓ		SODIUM mEq/ℓ	
Control	5	45±	8	24±	8	268±	50	1±	1	119±	76	21.9±	1.8	148±	3
625 ppm	5	35±	5	22±	5	204±	28	1±	0	52±	20	18.2±	3.5	148±	1
1250 ppm	5	36±	3	26±	2	194±	22	1±	1	59±	20	16.6±	1.2	148±	1
2500 ppm	5	38±	2	42±	3	250±	34	1±	0	65±	23	17.0±	2.9	148±	1
5000 ppm	5	61±	19	111±	45**	343±	118	20±	3	61±	26	20.4±	3.2	149±	1
10000 ppm	3	130±	30	116±	50*	3398±	305	29±	7*	262±	50	37.9±	11.0	152±	1**

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (2W)

Group Name	NO. of Animals	POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	5	4.6±	0.3	120±	2	9.1±	0.1	9.1±	1.2
625 ppm	5	4.4±	0.4	119±	1	9.2±	0.3	7.4±	1.5
1250 ppm	5	4.7±	0.4	119±	2	9.1±	0.3	9.1±	1.6
2500 ppm	5	4.2±	0.2	117±	1*	9.5±	0.1*	8.8±	1.1
5000 ppm	5	4.8±	0.7	115±	1**	9.6±	0.3**	7.8±	1.7
10000 ppm	3	5.7±	0.6*	115±	3**	9.4±	0.2	9.0±	3.1

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

APPENDIX G 1

GROSS FINDINGS : SUMMARY, MOUSE : MALE : ALL ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 2W)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	625 ppm 5 (%)	1250 ppm 5 (%)	2500 ppm 5 (%)
lung	dark		0 (0)	0 (0)	0 (0)	0 (0)
thymus	atrophic		0 (0)	0 (0)	0 (0)	0 (0)
spleen	enlarged		0 (0)	0 (0)	5 (100)	5 (100)
	dark		0 (0)	0 (0)	5 (100)	5 (100)
	black zone		0 (0)	1 (20)	1 (20)	0 (0)
liver	dark		0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	5000 ppm 5 (%)	10000 ppm 5 (%)
lung	dark		5 (100)	5 (100)
thymus	atrophic		0 (0)	2 (40)
spleen	enlarged		5 (100)	3 (60)
	dark		5 (100)	3 (60)
	black zone		0 (0)	0 (0)
liver	dark		5 (100)	3 (60)

APPENDIX G 2

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : ALL ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	625 ppm 5 (%)	1250 ppm 5 (%)	2500 ppm 5 (%)
lung	dark		0 (0)	0 (0)	0 (0)	0 (0)
thymus	atrophic		0 (0)	0 (0)	0 (0)	0 (0)
spleen	enlarged		0 (0)	0 (0)	5 (100)	5 (100)
	dark		0 (0)	0 (0)	5 (100)	5 (100)
liver	dark		0 (0)	0 (0)	0 (0)	0 (0)

Organ	Findings	Group Name NO. of Animals	5000 ppm 5 (%)	10000 ppm 5 (%)
lung	dark		5 (100)	5 (100)
thymus	atrophic		0 (0)	2 (40)
spleen	enlarged		5 (100)	3 (60)
	dark		5 (100)	3 (60)
liver	dark		5 (100)	3 (60)

APPENDIX G 3

GROSS FINDINGS : SUMMARY, MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	625 ppm 0 (%)	1250 ppm 0 (%)	2500 ppm 0 (%)
lung	dark		- (-)	- (-)	- (-)	- (-)
thymus	atrophic		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	5000 ppm 0 (%)	10000 ppm 2 (%)
lung	dark		- (-)	2 (100)
thymus	atrophic		- (-)	2 (100)

APPENDIX G 4

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name / NO. of Animals	Control 0 (%)	625 ppm 0 (%)	1250 ppm 0 (%)	2500 ppm 0 (%)
lung	dark		- (-)	- (-)	- (-)	- (-)
thymus	atrophic		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name NO. of Animals	5000 ppm 0 (%)	10000 ppm 2 (%)
lung	dark		- (-)	2 (100)
thymus	atrophic		- (-)	2 (100)

APPENDIX G 5

GROSS FINDINGS : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	625 ppm 5 (%)	1250 ppm 5 (%)	2500 ppm 5 (%)
lung	dark		0 (0)	0 (0)	0 (0)	0 (0)
spleen	enlarged		0 (0)	0 (0)	5 (100)	5 (100)
	dark		0 (0)	0 (0)	5 (100)	5 (100)
	black zone		0 (0)	1 (20)	1 (20)	0 (0)
liver	dark		0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name NO. of Animals	5000 ppm 5 (%)	10000 ppm 3 (%)
lung	dark		5 (100)	3 (100)
spleen	enlarged		5 (100)	3 (100)
	dark		5 (100)	3 (100)
	black zone		0 (0)	0 (0)
liver	dark		5 (100)	3 (100)

APPENDIX G 6

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	625 ppm 5 (%)	1250 ppm 5 (%)	2500 ppm 5 (%)
lung	dark		0 (0)	0 (0)	0 (0)	0 (0)
spleen	enlarged		0 (0)	0 (0)	5 (100)	5 (100)
	dark		0 (0)	0 (0)	5 (100)	5 (100)
liver	dark		0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name NO. of Animals	5000 ppm 5 (%)	10000 ppm 3 (%)
lung	dark		5 (100)	3 (100)
spleen	enlarged		5 (100)	3 (100)
	dark		5 (100)	3 (100)
liver	dark		5 (100)	3 (100)

APPENDIX H 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	25.5± 0.9	0.056± 0.010	0.009± 0.003	0.197± 0.009	0.142± 0.010	0.155± 0.010
625 ppm	5	25.1± 1.3	0.054± 0.003	0.008± 0.001	0.182± 0.017	0.141± 0.010	0.148± 0.010
1250 ppm	5	25.4± 1.1	0.056± 0.005	0.008± 0.002	0.195± 0.013	0.139± 0.011	0.157± 0.012
2500 ppm	5	25.4± 1.1	0.054± 0.011	0.008± 0.001	0.186± 0.014	0.141± 0.008	0.148± 0.011
5000 ppm	5	23.3± 0.9*	0.028± 0.007**	0.008± 0.001	0.182± 0.023	0.130± 0.005	0.149± 0.004
10000 ppm	3	15.4± 0.7**	0.007± 0.002**	0.009± 0.002	0.056± 0.010**	0.130± 0.006	0.146± 0.011

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.363± 0.017	0.048± 0.003	1.316± 0.072	0.446± 0.020
625 ppm	5	0.379± 0.027	0.056± 0.009	1.563± 0.156*	0.435± 0.015
1250 ppm	5	0.402± 0.032	0.072± 0.016	1.825± 0.127**	0.438± 0.020
2500 ppm	5	0.388± 0.028	0.112± 0.011**	2.229± 0.206**	0.437± 0.021
5000 ppm	5	0.375± 0.027	0.145± 0.017**	2.378± 0.100**	0.427± 0.011
10000 ppm	3	0.313± 0.014	0.111± 0.072	1.512± 0.145	0.419± 0.013

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

APPENDIX H 2

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	19.3± 0.7	0.069± 0.005	0.011± 0.001	0.027± 0.003	0.112± 0.009	0.134± 0.005
625 ppm	5	20.3± 0.7	0.075± 0.008	0.012± 0.002	0.025± 0.006	0.118± 0.012	0.144± 0.015
1250 ppm	5	20.0± 0.6	0.073± 0.007	0.012± 0.001	0.025± 0.006	0.119± 0.013	0.138± 0.009
2500 ppm	5	20.8± 0.8**	0.073± 0.008	0.011± 0.002	0.030± 0.007	0.118± 0.013	0.138± 0.010
5000 ppm	5	20.5± 0.7*	0.054± 0.008**	0.011± 0.003	0.027± 0.005	0.114± 0.004	0.141± 0.009
10000 ppm	3	13.0± 0.4**	0.008± 0.003**	0.008± 0.001	0.007± 0.002**	0.090± 0.004*	0.116± 0.006

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.251± 0.008	0.053± 0.004	0.925± 0.079	0.425± 0.023
625 ppm	5	0.265± 0.015	0.067± 0.004	1.291± 0.088**	0.446± 0.011
1250 ppm	5	0.271± 0.021	0.104± 0.018	1.394± 0.095**	0.431± 0.009
2500 ppm	5	0.266± 0.012	0.141± 0.015**	1.746± 0.122**	0.435± 0.013
5000 ppm	5	0.274± 0.020	0.172± 0.010**	2.111± 0.138**	0.417± 0.017
10000 ppm	3	0.244± 0.007	0.133± 0.004*	1.402± 0.031**	0.396± 0.016

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

APPENDIX I 1

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	25.5± 0.9	0.220± 0.033	0.037± 0.011	0.773± 0.041	0.557± 0.045	0.610± 0.044
625 ppm	5	25.1± 1.3	0.214± 0.017	0.034± 0.004	0.722± 0.039	0.559± 0.026	0.588± 0.022
1250 ppm	5	25.4± 1.1	0.219± 0.012	0.031± 0.005	0.770± 0.051	0.546± 0.031	0.620± 0.061
2500 ppm	5	25.4± 1.1	0.212± 0.037	0.032± 0.006	0.736± 0.070	0.557± 0.039	0.582± 0.022
5000 ppm	5	23.3± 0.9*	0.120± 0.031**	0.035± 0.004	0.782± 0.088	0.559± 0.024	0.639± 0.038
10000 ppm	3	15.4± 0.7**	0.043± 0.009**	0.056± 0.008**	0.360± 0.054**	0.842± 0.069**	0.948± 0.117*

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	1.427± 0.059	0.190± 0.018	5.180± 0.426	1.752± 0.095
625 ppm	5	1.510± 0.102	0.221± 0.030	6.211± 0.407*	1.733± 0.105
1250 ppm	5	1.581± 0.075*	0.282± 0.065**	7.188± 0.438**	1.727± 0.095
2500 ppm	5	1.529± 0.067	0.442± 0.036**	8.783± 0.688**	1.722± 0.084
5000 ppm	5	1.609± 0.090*	0.623± 0.084**	10.213± 0.450**	1.834± 0.044
10000 ppm	3	2.031± 0.119**	0.720± 0.455**	9.790± 0.643**	2.715± 0.085**

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

APPENDIX I 2

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	19.3± 0.7	0.361± 0.032	0.055± 0.006	0.138± 0.014	0.583± 0.032	0.694± 0.024
625 ppm	5	20.3± 0.7	0.372± 0.041	0.061± 0.007	0.124± 0.029	0.583± 0.049	0.712± 0.074
1250 ppm	5	20.0± 0.6	0.365± 0.026	0.060± 0.006	0.126± 0.029	0.597± 0.066	0.688± 0.033
2500 ppm	5	20.8± 0.8**	0.350± 0.026	0.055± 0.008	0.141± 0.029	0.568± 0.049	0.663± 0.042
5000 ppm	5	20.5± 0.7*	0.263± 0.037**	0.055± 0.015	0.132± 0.027	0.554± 0.030	0.686± 0.045
10000 ppm	3	13.0± 0.4**	0.059± 0.020**	0.059± 0.010	0.051± 0.018**	0.692± 0.036*	0.893± 0.067**

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

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (2W)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	1.307± 0.072	0.274± 0.014	4.803± 0.379	2.208± 0.078
625 ppm	5	1.306± 0.083	0.329± 0.017**	6.357± 0.368**	2.200± 0.088
1250 ppm	5	1.355± 0.101	0.519± 0.086**	6.978± 0.438**	2.157± 0.073
2500 ppm	5	1.280± 0.038	0.678± 0.068**	8.382± 0.303**	2.088± 0.045
5000 ppm	5	1.333± 0.073	0.836± 0.032**	10.281± 0.359**	2.031± 0.091*
10000 ppm	3	1.879± 0.031**	1.028± 0.016**	10.819± 0.414**	3.055± 0.201**

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

APPENDIX J 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : ALL ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0- 2W)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit			< 5>				< 5>				< 5>				< 5>			
	atrophy: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)
{Hematopoietic system}																		
bone marrow			< 5>				< 5>				< 5>				< 5>			
	erythropoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thymus			< 5>				< 5>				< 5>				< 5>			
	atrophy		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen			< 5>				< 5>				< 5>				< 5>			
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (60)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)
	deposit of melanin		0 (0)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	2 (40)	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)	1 (20)	2 (40)	0 (0)	0 (0)	0 (0)	5 (100)	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 5>			
	atrophy:olfactory epithelium		5	0	0	0	5	0	0	0
			(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Hematopoietic system}										
bone marrow			< 5>				< 5>			
	erythropoiesis:increased		0	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)
thymus			< 5>				< 4>			
	atrophy		0	0	0	0	0	0	4	0
			(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)
spleen			< 5>				< 5>			
	deposit of hemosiderin		0	5	0	0	0	4	0	0
			(0)	(100)	(0)	(0)	(0)	(80)	(0)	(0)
	deposit of melanin		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	5	0	0	0	2	3	0
			(0)	(100)	(0)	(0)	(0)	(40)	(60)	(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 / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
spleen		< a >	< 5>				< 5>				< 5>				< 5>			
	engorgement of erythrocyte	b	0	0	0	0	0	0	0	0	4	0	0	0	5	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Circulatory system}																		
vein		< a >	< 5>				< 5>				< 5>				< 5>			
	thrombus	b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tongue		< a >	< 5>				< 5>				< 5>				< 5>			
	mineralization	b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach		< a >	< 5>				< 5>				< 5>				< 5>			
	erosion:forestomach	b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	b	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)*	(0)	(0)	(0)	(0)	(20)	(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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}										
spleen			< 5>				< 5>			
	engorgement of erythrocyte		5	0	0	0	1	4	0	0
			(100)	(0)	(0)	(0)	(20)	(80)	(0)	(0)
{Circulatory system}										
vein			< 5>				< 5>			
	thrombus		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(60)	(0)	(0)	(0)
{Digestive system}										
tongue			< 5>				< 5>			
	mineralization		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
stomach			< 5>				< 5>			
	erosion:forestomach		0	0	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(40)	(20)	(0)	(0)
	hyperplasia:forestomach		1	0	0	0	1	2	0	0
			(20)	(0)	(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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
liver			< 5>				< 5>				< 5>				< 5>			
	increase in mitosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)
	necrosis:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:single 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)
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hydropic change:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hepatocellular hypertrophy:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)
{Endocrine system}																		
pituitary			< 5>				< 5>				< 5>				< 5>			
	Rathke pouch		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}										
liver			< 5>				< 5>			
	increase in mitosis		5	0	0	0	0	0	0	0
			(100)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:central		0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)
	necrosis:single cell		0	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(40)	(20)	(0)	(0)
	hydropic change:central		0	0	0	0	0	3	0	0
			(0)	(0)	(0)	(0)	(0)	(60)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	5	0	0	0	2	0
			(0)	(0)	(100)	(0)	(0)	(0)	(40)	(0)
{Endocrine system}										
pituitary			< 5>				< 5>			
	Rathke pouch		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 / No. of Animals on Study / Grade	Control 5 1 (%)	Control 5 2 (%)	Control 5 3 (%)	Control 5 4 (%)	625 ppm 5 1 (%)	625 ppm 5 2 (%)	625 ppm 5 3 (%)	625 ppm 5 4 (%)	1250 ppm 5 1 (%)	1250 ppm 5 2 (%)	1250 ppm 5 3 (%)	1250 ppm 5 4 (%)	2500 ppm 5 1 (%)	2500 ppm 5 2 (%)	2500 ppm 5 3 (%)	2500 ppm 5 4 (%)
{Reproductive system}																		
testis		< 5>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	germ cell necrosis		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
epididymis		< 5>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	debris of spermatic elements		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain		< 5>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	hemorrhage		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
Harder gl		< 5>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	necrosis		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle		< 5>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mineralization		(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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}										
testis			< 5>				< 5>			
	germ cell necrosis		0	0	0	0	2	3	0	0
			(0)	(0)	(0)	(0)	(40)	(60)	(0)	(0)
epididymis			< 5>				< 4>			
	debris of spermatic elements		0	0	0	0	3	1	0	0
			(0)	(0)	(0)	(0)	(75)	(25)	(0)	(0)
{Nervous system}										
brain			< 5>				< 5>			
	hemorrhage		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Special sense organs/appendage}										
Harder gl			< 5>				< 5>			
	necrosis		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Musculoskeletal system}										
muscle			< 5>				< 5>			
	mineralization		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(60)	(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 J 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : ALL ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit		< 5>					< 5>				< 5>				< 5>			
	respiratory metaplasia:gland		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 (20)	0 (0)	0 (0)	0 (0)
	atrophy: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)
lung		< 5>					< 5>				< 5>				< 5>			
	congestion		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Hematopoietic system}																		
bone marrow		< 5>					< 5>				< 5>				< 5>			
	erythropoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thymus		< 5>					< 5>				< 5>				< 5>			
	atrophy		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen		< 5>					< 5>				< 5>				< 5>			
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 5>			
	respiratory metaplasia:gland		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	atrophy:olfactory epithelium		3	0	0	0	4	1	0	0
			(60)	(0)	(0)	(0)	(80)	(20)	(0)	(0)
lung			< 5>				< 5>			
	congestion		0	0	0	0	0	2	0	0
			(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)
{Hematopoietic system}										
bone marrow			< 5>				< 5>			
	erythropoiesis:increased		5	0	0	0	4	0	0	0
			(100)	(0)	(0)	(0)	(80)	(0)	(0)	(0)
thymus			< 5>				< 5>			
	atrophy		0	0	0	0	0	0	5	0
			(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)
spleen			< 5>				< 5>			
	deposit of hemosiderin		0	5	0	0	4	1	0	0
			(0)	(100)	(0)	(0)	(80)	(20)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			< 5>				< 5>				< 5>				< 5>			
	extramedullary hematopoiesis		0	0	0	0	4	0	0	0	0	5	0	0	0	5	0	0
			(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)
	engorgement of erythrocyte		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)
{Circulatory system}																		
heart			< 5>				< 5>				< 5>				< 5>			
	mineralization		0	0	0	0	0	0	0	0	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			< 5>				< 5>				< 5>				< 5>			
	erosion:forestomach		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)
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(20)	(20)	(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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}										
spleen			< 5>				< 5>			
	extramedullary hematopoiesis		0	5	0	0	0	1	4	0
			(0)	(100)	(0)	(0)	(0)	(20)	(80)	(0)
	engorgement of erythrocyte		5	0	0	0	3	2	0	0
			(100)	(0)	(0)	(0)	(60)	(40)	(0)	(0)
{Circulatory system}										
heart			< 5>				< 5>			
	mineralization		0	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)
{Digestive system}										
stomach			< 5>				< 5>			
	erosion:forestomach		1	0	0	0	1	0	0	0
			(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	hyperplasia:forestomach		0	2	0	0	1	1	0	0
			(0)	(40)	(0)	(0)	(20)	(20)	(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 / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
liver			< 5>				< 5>				< 5>				< 5>			
	increase in mitosis		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 (60)	0 (0)	0 (0)	0 (0)
	necrosis:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hydropic change:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hepatocellular hypertrophy:central		0 (0)	0 (0)	0 (0)	0 (0)	1 (20)	3 (60)	1 (20)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)
{Urinary system}																		
kidney			< 5>				< 5>				< 5>				< 5>			
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Endocrine system}																		
adrenal			< 5>				< 5>				< 5>				< 5>			
	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)	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}										
liver			< 5>				< 5>			
	increase in mitosis		4	0	0	0	0	0	0	0
			(80)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:central		0	0	0	0	0	2	0	0
			(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	1	3	0	0
			(0)	(0)	(0)	(0)	(20)	(60)	(0)	(0)
	hydropic change:central		0	0	0	0	0	2	0	0
			(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	5	0	0	0	3	0
			(0)	(0)	(100)	(0)	(0)	(0)	(60)	(0)
{Urinary system}										
kidney			< 5>				< 5>			
	deposit of hemosiderin		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(60)	(0)	(0)	(0)
{Endocrine system}										
adrenal			< 5>				< 5>			
	extramedullary hematopoiesis		0	0	0	0	1	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 / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Nervous system}																		
brain			< 5>				< 5>				< 5>				< 5>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle			< 5>				< 5>				< 5>				< 5>			
	mineralization		0	0	0	0	0	0	0	0	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}										
brain			< 5>				< 5>			
	hemorrhage		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Musculoskeletal system}										
muscle			< 5>				< 5>			
	mineralization		0	0	0	0	1	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

APPENDIX J 3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 2W)

Organ	Findings	Group Name	Control				625 ppm				1250 ppm				2500 ppm			
		No. of Animals on Study	0				0				0				0			
		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>			
	atrophy:olfactory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Hematopoietic system}																		
bone marrow			< 0>				< 0>				< 0>				< 0>			
	erythropoiesis:increased		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
thymus			< 0>				< 0>				< 0>				< 0>			
	atrophy		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
spleen			< 0>				< 0>				< 0>				< 0>			
	deposit of hemosiderin		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	extramedullary hematopoiesis		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	engorgement of erythrocyte		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 0>				< 2>			
	atrophy:olfactory epithelium		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
{Hematopoietic system}										
bone marrow			< 0>				< 2>			
	erythropoiesis:increased		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
thymus			< 0>				< 1>			
	atrophy		-	-	-	-	0	0	1	0
			(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)
spleen			< 0>				< 2>			
	deposit of hemosiderin		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(50)	(0)	(0)
	extramedullary hematopoiesis		-	-	-	-	0	1	1	0
			(-)	(-)	(-)	(-)	(0)	(50)	(50)	(0)
	engorgement of erythrocyte		-	-	-	-	0	2	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)

Grade 1 : Slight 2 : Modorate 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	Control				625 ppm				1250 ppm				2500 ppm			
		No. of Animals on Study	0				0				0				0			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
vein			< 0>				< 0>				< 0>				< 0>			
	thrombus		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Digestive system}																		
tongue			< 0>				< 0>				< 0>				< 0>			
	mineralization		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
stomach			< 0>				< 0>				< 0>				< 0>			
	erosion:forestomach		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hyperplasia:forestomach		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
liver			< 0>				< 0>				< 0>				< 0>			
	necrosis:central		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	necrosis:single cell		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}										
vein			< 0>				< 2>			
	thrombus		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
{Digestive system}										
tongue			< 0>				< 2>			
	mineralization		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
stomach			< 0>				< 2>			
	erosion:forestomach		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
	hyperplasia:forestomach		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(50)	(0)	(0)
liver			< 0>				< 2>			
	necrosis:central		-	-	-	-	0	1	0	0
			(-)	(-)	(-)	(-)	(0)	(50)	(0)	(0)
	necrosis:single cell		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		No. of Animals on Study	0				0				0				0			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			< 0>				< 0>				< 0>				< 0>			
	deposit of hemosiderin		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hydropic change:central		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Reproductive system}																		
testis			< 0>				< 0>				< 0>				< 0>			
	germ cell necrosis		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
epididymis			< 0>				< 0>				< 0>				< 0>			
	debris of spermatic elements		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Nervous system}																		
brain			< 0>				< 0>				< 0>				< 0>			
	hemorrhage		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}										
liver			< 0>				< 2>			
	deposit of hemosiderin		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
	hydropic change:central		-	-	-	-	0	2	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
{Reproductive system}										
testis			< 0>				< 2>			
	germ cell necrosis		-	-	-	-	1	1	0	0
			(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
epididymis			< 0>				< 1>			
	debris of spermatic elements		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
{Nervous system}										
brain			< 0>				< 2>			
	hemorrhage		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		No. of Animals on Study	0				0				0				0			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			< 0>				< 0>				< 0>				< 0>			
	necrosis		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Musculoskeletal system}																		
muscle			< 0>				< 0>				< 0>				< 0>			
	mineralization		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}										
Harder gl			< 0>				< 2>			
	necrosis		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
{Musculoskeletal system}										
muscle			< 0>				< 2>			
	mineralization		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(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 J 4

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name	Control				625 ppm				1250 ppm				2500 ppm			
		No. of Animals on Study	0				0				0				0			
		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>			
	atrophy:olfactory epithelium		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
lung			< 0>				< 0>				< 0>				< 0>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Hematopoietic system}																		
bone marrow			< 0>				< 0>				< 0>				< 0>			
	erythropoiesis:increased		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
thymus			< 0>				< 0>				< 0>				< 0>			
	atrophy		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
spleen			< 0>				< 0>				< 0>				< 0>			
	deposit of hemosiderin		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	extramedullary hematopoiesis		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 0>				< 2>			
	atrophy:olfactory epithelium		-	-	-	-	1	1	0	0
			(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
lung			< 0>				< 2>			
	congestion		-	-	-	-	0	2	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
{Hematopoietic system}										
bone marrow			< 0>				< 2>			
	erythropoiesis:increased		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
thymus			< 0>				< 2>			
	atrophy		-	-	-	-	0	0	2	0
			(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)
spleen			< 0>				< 2>			
	deposit of hemosiderin		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
	extramedullary hematopoiesis		-	-	-	-	0	1	1	0
			(-)	(-)	(-)	(-)	(0)	(50)	(50)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		No. of Animals on Study	0				0				0				0			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			< 0>				< 0>				< 0>				< 0>			
	engorgement of erythrocyte		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Circulatory system}																		
heart			< 0>				< 0>				< 0>				< 0>			
	mineralization		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
{Digestive system}																		
liver			< 0>				< 0>				< 0>				< 0>			
	necrosis:central		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	deposit of hemosiderin		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hydropic change:central		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}										
spleen			< 0>				< 2>			
	engorgement of erythrocyte		-	-	-	-	0	2	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
{Circulatory system}										
heart			< 0>				< 2>			
	mineralization		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
{Digestive system}										
liver			< 0>				< 2>			
	necrosis:central		-	-	-	-	0	2	0	0
			(-)	(-)	(-)	(-)	(0)	(100)	(0)	(0)
	deposit of hemosiderin		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
	hydropic change:central		-	-	-	-	0	2	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 5

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0434
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name	Control				625 ppm				1250 ppm				2500 ppm			
		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>			
	atrophy: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)
{Hematopoietic system}																		
bone marrow			< 5>				< 5>				< 5>				< 5>			
	erythropoiesis:increased		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thymus			< 5>				< 5>				< 5>				< 5>			
	atrophy		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			< 5>				< 5>				< 5>				< 5>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	3	0	0	0	0	5	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
	deposit of melanin		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)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	0	0	0	0	1	2	0	0	0	5	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(40)	(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

Organ	Findings	Group Name	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 3>			
	atrophy:olfactory epithelium		5	0	0	0	3	0	0	0
			(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Hematopoietic system}										
bone marrow			< 5>				< 3>			
	erythropoiesis:increased		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
thymus			< 5>				< 3>			
	atrophy		0	0	0	0	0	0	3	0
			(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)
spleen			< 5>				< 3>			
	deposit of hemosiderin		0	5	0	0	0	3	0	0
			(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)
	deposit of melanin		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	5	0	0	0	1	2	0
			(0)	(100)	(0)	(0)	(0)	(33)	(67)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			< 5>				< 5>				< 5>				< 5>			
	engorgement of erythrocyte		0	0	0	0	0	0	0	0	4	0	0	0	5	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Circulatory system}																		
vein			< 5>				< 5>				< 5>				< 5>			
	thrombus		0	0	0	0	0	0	0	0	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			< 5>				< 5>				< 5>				< 5>			
	erosion:forestomach		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		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)	(20)	(0)	(0)
liver			< 5>				< 5>				< 5>				< 5>			
	increase in mitosis		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)	(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

Organ	Findings	Group Name	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}										
spleen			< 5>				< 3>			
	engorgement of erythrocyte		5	0	0	0	1	2	0	0
			(100)	(0)	(0)	(0)	(33)	(67)	(0)	(0)
{Circulatory system}										
vein			< 5>				< 3>			
	thrombus		0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(67)	(0)	(0)	(0)
{Digestive system}										
stomach			< 5>				< 3>			
	erosion:forestomach		0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(33)	(33)	(0)	(0)
	hyperplasia:forestomach		1	0	0	0	1	1	0	0
			(20)	(0)	(0)	(0)	(33)	(33)	(0)	(0)
liver			< 5>				< 3>			
	increase in mitosis		5	0	0	0	0	0	0	0
			(100)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			< 5>				< 5>				< 5>				< 5>			
	necrosis:single 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)
	deposit of hemosiderin		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hydropic change:central		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	0	0	0	0	5	0	0	0	5	0	0	0	5	0
			(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)
{Endocrine system}																		
pituitary			< 5>				< 5>				< 5>				< 5>			
	Rathke pouch		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)
{Reproductive system}																		
testis			< 5>				< 5>				< 5>				< 5>			
	germ cell necrosis		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}										
liver			< 5>				< 3>			
	necrosis:single cell		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)
	hydropic change:central		0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	5	0	0	0	2	0
			(0)	(0)	(100)	(0)	(0)	(0)	(67)	(0)
{Endocrine system}										
pituitary			< 5>				< 3>			
	Rathke pouch		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}										
testis			< 5>				< 3>			
	germ cell necrosis		0	0	0	0	1	2	0	0
			(0)	(0)	(0)	(0)	(33)	(67)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
epididymis			< 5>				< 5>				< 5>				< 5>			
	debris of spermatic elements		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle			< 5>				< 5>				< 5>				< 5>			
	mineralization		0	0	0	0	0	0	0	0	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}										
epididymis			< 5>				< 3>			
	debris of spermatic elements		0	0	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(67)	(33)	(0)	(0)
{Musculoskeletal system}										
muscle			< 5>				< 3>			
	mineralization		0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(67)	(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 / No. of Animals on Study / Grade	Control 5				625 ppm 5				1250 ppm 5				2500 ppm 5			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit			< 5>				< 5>				< 5>				< 5>			
	respiratory metaplasia:gland		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 (20)	0 (0)	0 (0)	0 (0)
	atrophy: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)
{Hematopoietic system}																		
bone marrow			< 5>				< 5>				< 5>				< 5>			
	erythropoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thymus			< 5>				< 5>				< 5>				< 5>			
	atrophy		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen			< 5>				< 5>				< 5>				< 5>			
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	0 (0)	0 (0)	0 (0)	0 (0)	5 (100)	0 (0)	0 (0)	0 (0)	5 (100)	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

APPENDIX J 6

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 5>				< 3>			
	respiratory metaplasia:gland		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
	atrophy:olfactory epithelium		3	0	0	0	3	0	0	0
			(60)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Hematopoietic system}										
bone marrow			< 5>				< 3>			
	erythropoiesis:increased		5	0	0	0	3	0	0	0
			(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
thymus			< 5>				< 3>			
	atrophy		0	0	0	0	0	0	3	0
			(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)
spleen			< 5>				< 3>			
	deposit of hemosiderin		0	5	0	0	2	1	0	0
			(0)	(100)	(0)	(0)	(67)	(33)	(0)	(0)
	extramedullary hematopoiesis		0	5	0	0	0	0	3	0
			(0)	(100)	(0)	(0)	(0)	(0)	(100)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			< 5>				< 5>				< 5>				< 5>			
	engorgement of erythrocyte		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)
{Circulatory system}																		
heart			< 5>				< 5>				< 5>				< 5>			
	mineralization		0	0	0	0	0	0	0	0	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			< 5>				< 5>				< 5>				< 5>			
	erosion:forestomach		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)
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(20)	(20)	(0)	(0)
liver			< 5>				< 5>				< 5>				< 5>			
	increase in mitosis		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)	(60)	(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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}										
spleen			< 5>				< 3>			
	engorgement of erythrocyte		5	0	0	0	3	0	0	0
			(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Circulatory system}										
heart			< 5>				< 3>			
	mineralization		0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(67)	(0)	(0)	(0)
{Digestive system}										
stomach			< 5>				< 3>			
	erosion:forestomach		1	0	0	0	1	0	0	0
			(20)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
	hyperplasia:forestomach		0	2	0	0	1	1	0	0
			(0)	(40)	(0)	(0)	(33)	(33)	(0)	(0)
liver			< 5>				< 3>			
	increase in mitosis		4	0	0	0	0	0	0	0
			(80)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			< 5>				< 5>				< 5>				< 5>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	0	0	1	3	1	0	0	0	5	0	0	0	5	0
			(0)	(0)	(0)	(0)	(20)	(60)	(20)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)
{Urinary system}																		
kidney			< 5>				< 5>				< 5>				< 5>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
adrenal			< 5>				< 5>				< 5>				< 5>			
	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain			< 5>				< 5>				< 5>				< 5>			
	hemorrhage		0	0	0	0	0	0	0	0	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}										
liver			< 5>				< 3>			
	deposit of hemosiderin		0	0	0	0	0	3	0	0
			(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	5	0	0	0	3	0
			(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)
{Urinary system}										
kidney			< 5>				< 3>			
	deposit of hemosiderin		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
{Endocrine system}										
adrenal			< 5>				< 3>			
	extramedullary hematopoiesis		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
{Nervous system}										
brain			< 5>				< 3>			
	hemorrhage		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(33)	(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	Control				625 ppm				1250 ppm				2500 ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
muscle			< 5>				< 5>				< 5>				< 5>			
	mineralization		0	0	0	0	0	0	0	0	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	5000 ppm				10000 ppm			
		No. of Animals on Study	5				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}										
muscle			< 5>				< 3>			
	mineralization		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(33)	(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 1

IDENTITY OF *o*-CHLORONITROBENZENE IN THE 2-WEEK FEED STUDY

IDENTITY OF o-CHLORONITROBENZENE IN THE 2-WEEK FEED STUDY

Test Substance : o-Chloronitrobenzene (Wako Pure Chemical Industries, Ltd.)

Lot No. : PAK9795

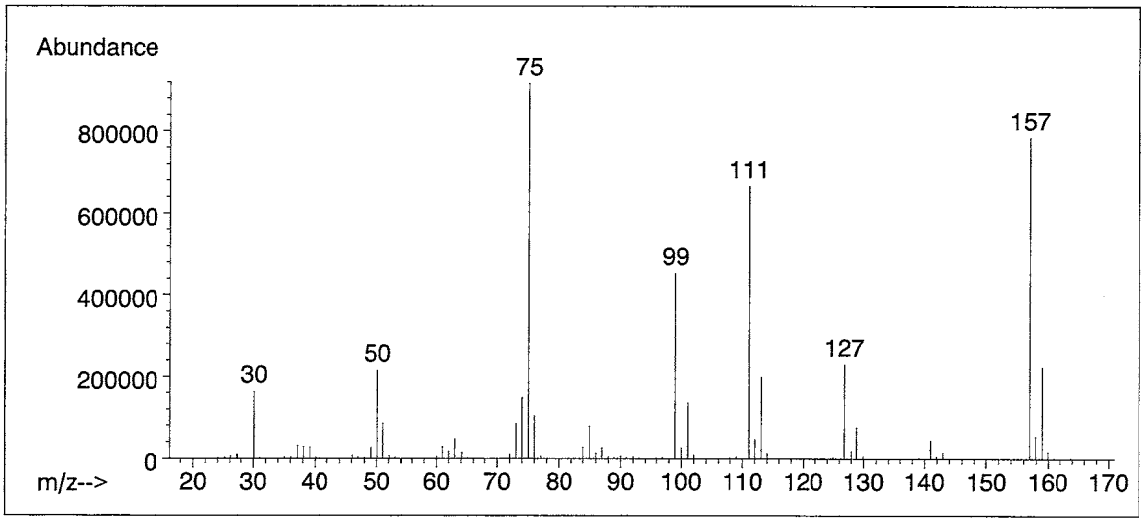
1. Spectral Data

Mass Spectrometry

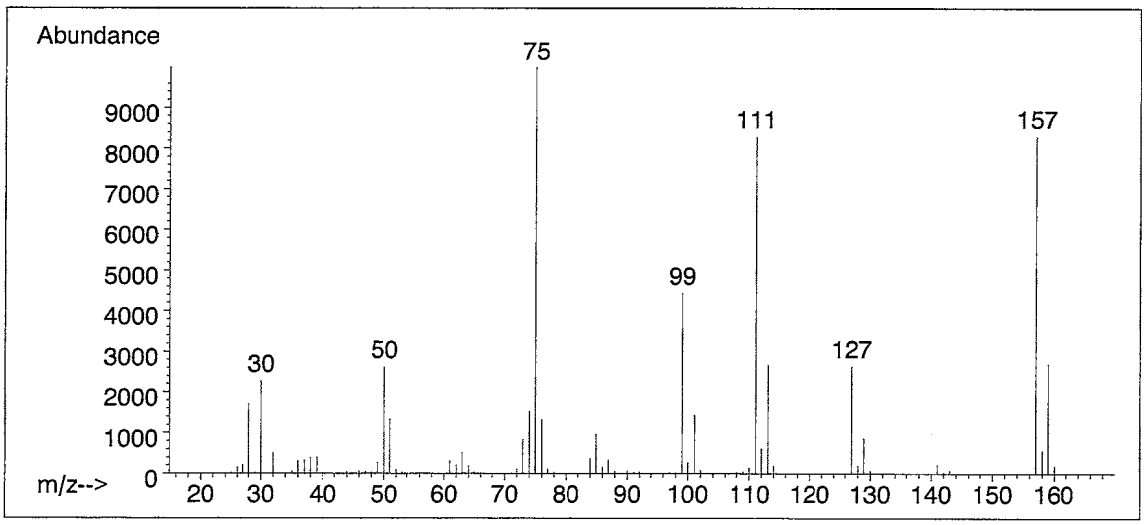
Instrument : Hewlett Packard 5989B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

Results: The mass spectrum was consistent with literature spectrum.

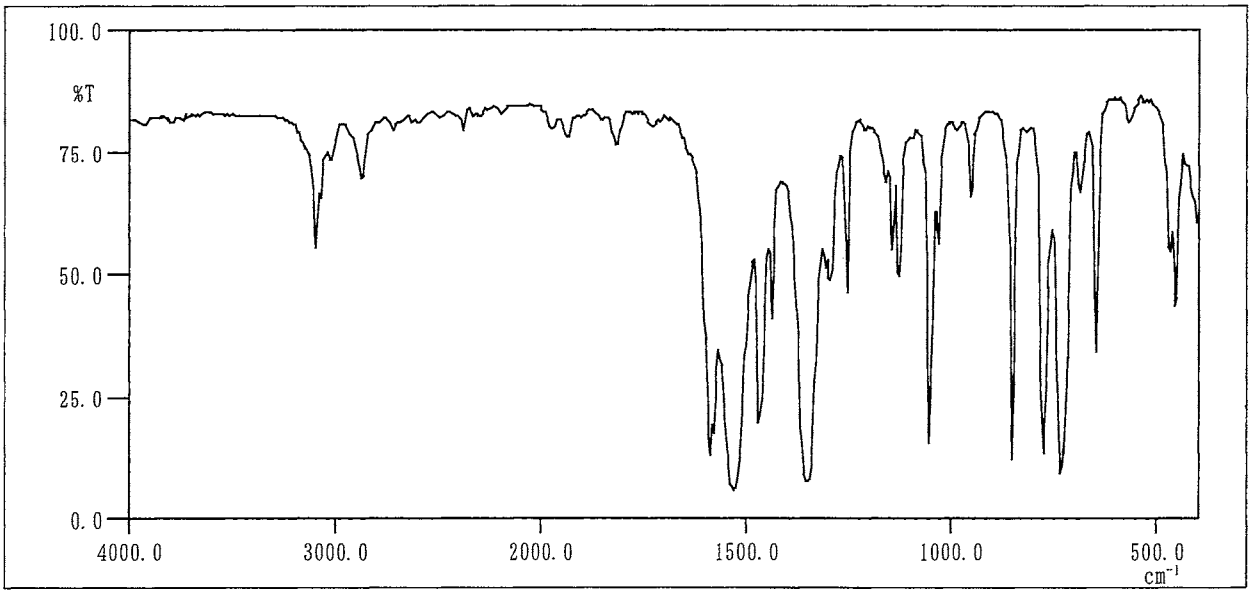
(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition. John Wiley and Sons, Inc. (U.S.), Entry Number 42503)

Infrared Spectrometry

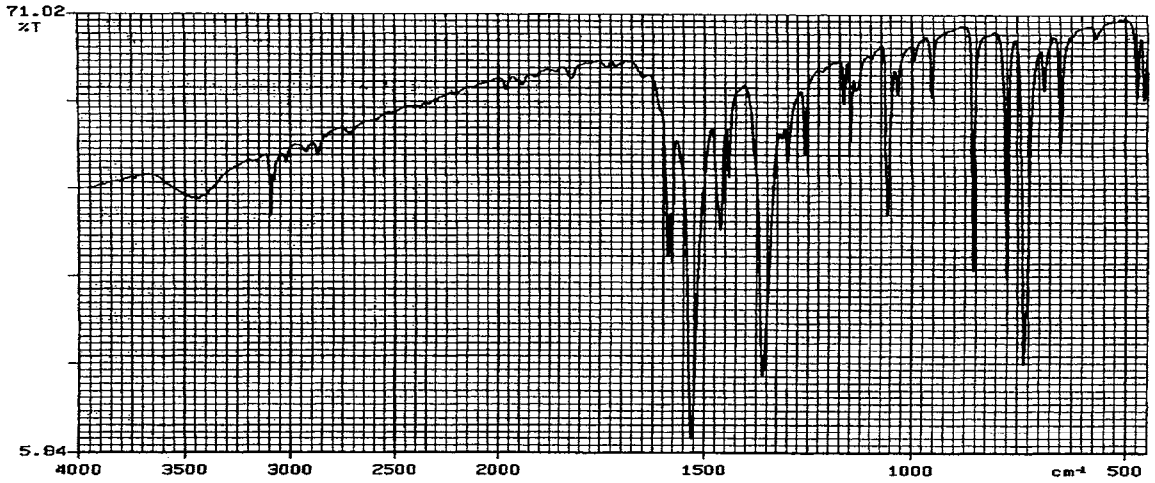
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr

Resolution : 2 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

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

2. Conclusions: The test substance was identified as o-chloronitrobenzene by the mass spectrum and the infrared spectrum.

APPENDIX K 2

STABILITY OF *o*-CHLORONITROBENZENE IN THE 2-WEEK FEED STUDY

STABILITY OF o-CHLORONITROBENZENE IN THE 2-WEEK FEED STUDY

Test Substance : o-Chloronitrobenzene (Wako Pure Chemical Industries, Ltd.)

Lot No. : PAK9795

1. Sample : This lot was used from 2001.7.24 to 2001.8.7. Test substance was stored in cold storage in a dark place.

2. High Performance Liquid Chromatography

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph

Column : TSK GEL ODS-80TM (4.6 mmϕ × 15 cm)

Column Temperature : Room Temperature

Mobile Phase : Acetonitrile : Distilled Water = 1 : 1

Flow Rate : 1 mL/min

Detector : UV (254 nm)

Injection Volume : 20 μL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2001.07.04	1	6.955	100
2001.08.10	1	6.923	100

Results: Gas chromatography indicated one major peak (peak No.1) analyzed on 2001.7.4 and one major peak (peak No.1) analyzed on 2001.8.10. No new trace impurity peak in the test substance analyzed on 2001.8.10 was detected.

3. Conclusions: The test substance was stable for about 1 month in cold storage in a dark place.

APPENDIX K 3

CONCENTRATION OF *o*-CHLORONITROBENZENE IN FORMULATED DIETS IN THE 2-WEEK FEED STUDY

CONCENTRATION OF o-CHLORONITROBENZENE IN FORMULATED DIETS IN THE 2-WEEK FEED STUDY

	Target Concentration				
Date Analyzed	625[a]	1250	2500	5000	10000
2001.07.23	612 (97.9)[b]	1160 (92.8)	2360 (94.4)	4860 (97.2)	9700 (97.0)

[a] ppm
[b] %

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

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph
Column : TSK GEL ODS-80TM (4.6 mmϕ $\times$ 15 cm)
Column Temperature : Room Temperature
Mobile Phase : Acetonitrile : Distilled Water = 1 : 1
Flow Rate : 1 mL/min
Detector : UV (254 nm)
Injection Volume : 20 µL

APPENDIX K 4

HOMOGENITY OF *o*-CHLORONITROBENZENE IN FORMULATED DIETS IN THE 2-WEEK FEED STUDY

HOMOGENEITY OF o-CHLORONITROBENZENE IN FORMULATED DIETS IN THE 2-WEEK FEED STUDY

	Target Concentration				
	625[a]	1250	2500	5000	10000
Coefficient Variation	7.67[b]	3.47	2.72	2.93	1.63

[a] ppm
[b] % (n=7)

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

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph
Column : TSK GEL ODS-80TM (4.6 mmϕ $\times$ 15 cm)
Column Temperature : Room Temperature
Mobile Phase : Acetonitrile : Distilled Water = 1 : 1
Flow Rate : 1 mL/min
Detector : UV (254 nm)
Injection Volume : 20 µL

APPENDIX K 5

STABILITY OF *o*-CHLORONITROBENZENE IN FORMULATED DIETS IN THE 2-WEEK FEED STUDY

STABILITY OF o-CHLORONITROBENZENE IN FORMULATED DIETS IN THE 2-WEEK FEED STUDY

		Target Concentration	
Date Prepared	Date Analyzed	500[a]	10000
2001.06.07	2001.06.07	489 (100)[b]	9990 (100)
	2001.06.15[c]	386 (78.9)	8260 (82.7)
	2001.06.15[d]	486 (99.4)	9670 (96.8)
	2001.08.02[d]	515 (105)	9610 (96.2)

[a] ppm
[b] % (Percentage was based on the concentration on date of preparation.)
[c] Animal room samples
[d] Cold storage samples

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

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph
Column : TSK GEL ODS-80TM (4.6 mmϕ $\times$ 15 cm)
Column Temperature : Room Temperature
Mobile Phase : Acetonitrile : Distilled Water = 1 : 1
Flow Rate : 1 mL/min
Detector : UV (254 nm)
Injection Volume : 20 µL

APPENDIX L 1

METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Item	Method
Hematology	
Red blood cell (RBC)	Light scattering method [1]
Hemoglobin (Hgb)	Cyanmethemoglobin method [1]
Hematocrit (Hct)	Calculated as RBC×MCV/10 [1]
Mean corpuscular volume (MCV)	Light scattering method [1]
Mean corpuscular hemoglobin (MCH)	Calculated as Hgb/RBC×10 [1]
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct×100 [1]
Platelet	Light scattering method [1]
White blood cell (WBC)	Light scattering method [1]
Differential WBC	Pattern recognition method [2] (Wright staining)
Biochemistry	
Total protein (TP)	Biuret method [3]
Albumin (Alb)	BCG method [3]
A/G ratio	Calculated as Alb/(TP−Alb) [3]
T-bilirubin	Alkaline azobilirubin method [3]
Glucose	GlcK·G-6-PDH method [3]
T-cholesterol	CE·COD·POD method [3]
Phospholipid	PLD·ChOD·POD method [3]
Glutamic oxaloacetic transaminase (GOT)	JSCC method [3]
Glutamic pyruvic transaminase (GPT)	JSCC method [3]
Lactate dehydrogenase (LDH)	SFBC method [3]
γ-Glutamyl transpeptidase (γ-GTP)	L-γ-Glutamyl-p-nitroanilide method [3]
Creatine phosphokinase (CPK)	JSCC method [3]
Urea nitrogen	Urease·GLDH method [3]
Sodium	Ion selective electrode method [3]
Potassium	Ion selective electrode method [3]
Chloride	Ion selective electrode method [3]
Calcium	OCPC method [3]
Inorganic phosphorus	PNP·XOD·POD method [3]

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

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

3) Automatic analyzer (Hitachi 7070 : Hitachi,Ltd.)

APPENDIX M 1

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY
IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Item	Unit	Decimal Place
Hematology		
Red blood cell (RBC)	$\times 10^6/\mu L$	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	$\times 10^3/\mu L$	0
White blood cell (WBC)	$\times 10^3/\mu L$	2
Differential WBC	%	0
Biochemistry		
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
Phospholipid	mg/dL	0
Glutamic oxaloacetic transaminase (GOT)	IU/L	0
Glutamic pyruvic transaminase (GPT)	IU/L	0
Lactate dehydrogenase (LDH)	IU/L	0
γ-Glutamyl transpeptidase (γ-GTP)	IU/L	0
Creatine phosphokinase (CPK)	IU/L	0
Urea nitrogen	mg/dL	1
Sodium	mEq/L	0
Potassium	mEq/L	1
Chloride	mEq/L	0
Calcium	mg/dL	1
Inorganic phosphorus	mg/dL	1