ジクロロメタンのマウスを用いた
吸入による 13 週間毒性試験報告書

試験番号：0258

APPENDIX

APPENDIXES

APPENDIXES (CONTINUED)

APPENDIXES (CONTINUED)

APPENDIX A 1

CLINICAL OBSERVATION :SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1 13

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8000 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	1

APPENDIX B 1

BODY WEIGHT CHANGES :SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	22.2± 0.7	24.0± 0.8	25.0± 0.6	26.2± 0.9	26.9± 0.8	27.5± 0.9	28.5± 1.0
500 ppm	22.1± 0.8	23.8± 0.9	24.8± 1.2	25.8± 1.2	26.5± 1.1	27.0± 1.3	27.5± 1.2
1000 ppm	22.4± 1.0	23.7± 0.8	24.6± 1.1	25.4± 0.9	26.1± 1.1	26.6± 1.4	27.4± 1.5
2000 ppm	22.3± 0.8	24.2± 0.8	25.1± 0.9	26.0± 0.9	26.7± 1.0	27.2± 1.2	27.5± 1.2
4000 ppm	22.4± 0.5	24.3± 0.7	25.4± 0.8	26.1± 1.0	27.0± 1.3	27.7± 1.1	28.4± 0.9
8000 ppm	22.0± 0.6	22.5± 0.8**	24.1± 0.8	25.3± 1.1	26.2± 1.1	26.9± 0.9	27.4± 1.1

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-6
Control	29.1± 1.2	29.8± 1.2	30.7± 1.1	31.5± 1.5	32.0± 1.5	32.7± 1.5	33.0± 1.6
500 ppm	28.3± 1.4	29.0± 1.5	29.4± 1.5	30.1± 1.4	30.4± 1.2	31.0± 1.4	32.1± 1.5
1000 ppm	27.7± 1.5*	28.2± 1.7*	28.9± 2.0	30.0± 2.1	30.4± 2.0	30.8± 2.4	31.7± 2.4
2000 ppm	27.4± 1.4*	28.3± 1.6	28.6± 2.2	29.0± 2.2	30.1± 2.2	30.5± 2.6	31.8± 2.4
4000 ppm	28.8± 0.8	29.8± 0.7	29.9± 1.2	30.7± 1.2	31.0± 1.5	31.7± 1.7	33.0± 1.7
8000 ppm	27.9± 1.0	28.9± 1.5	29.5± 1.9	30.0± 2.0	30.4± 2.2	30.8± 2.1	31.9± 1.9

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

APPENDIX B 2

BODY WEIGHT CHANGES : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	18.5± 0.5	19.8± 0.7	20.9± 0.9	21.5± 0.5	22.1± 1.0	22.3± 0.8	23.6± 1.0
500 ppm	18.6± 0.8	19.9± 0.9	20.7± 0.5	21.5± 1.1	22.4± 0.8	22.9± 1.2	23.8± 0.9
1000 ppm	18.2± 0.5	19.7± 0.8	20.5± 0.8	21.4± 0.7	22.2± 0.9	22.7± 0.6	23.5± 0.9
2000 ppm	18.7± 0.6	19.7± 0.8	20.6± 1.2	21.7± 1.1	22.3± 1.0	22.0± 1.2	23.1± 1.3
4000 ppm	18.7± 0.8	19.8± 0.7	20.4± 0.7	21.1± 0.7	22.3± 0.8	22.4± 0.9	22.9± 0.7
8000 ppm	18.4± 0.7	18.2± 1.1**	19.2± 0.3**	19.7± 0.3**	20.5± 0.8**	21.1± 0.8*	21.4± 0.7**

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-6
Control	24.2± 1.4	24.2± 1.4	24.1± 0.8	24.7± 0.8	25.2± 1.0	26.0± 1.2	26.0± 1.8
500 ppm	24.4± 0.9	24.4± 1.4	24.9± 1.0	25.1± 1.3	26.0± 1.7	25.5± 1.0	26.1± 1.1
1000 ppm	23.6± 0.5	24.3± 1.3	24.8± 0.8	24.7± 0.9	25.1± 0.5	25.1± 0.9	25.3± 1.0
2000 ppm	23.7± 1.2	23.7± 1.2	25.1± 1.6	24.1± 1.5	24.8± 1.3	24.8± 1.2	25.8± 1.3
4000 ppm	23.5± 0.5	24.0± 1.2	24.3± 0.7	24.7± 0.8	24.5± 0.8	24.9± 1.0	25.5± 1.2
8000 ppm	22.0± 0.9**	21.8± 1.1**	22.4± 1.0**	22.6± 1.1**	22.5± 0.8**	23.1± 1.1**	23.5± 1.1**

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

APPENDIX C 1

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	4.4± 0.2	4.4± 0.2	4.4± 0.2	4.4± 0.3	4.5± 0.3	4.5± 0.2	4.7± 0.3
500 ppm	4.5± 0.3	4.5± 0.7	4.4± 0.2	4.4± 0.2	4.5± 0.2	4.5± 0.2	4.8± 0.4
1000 ppm	4.3± 0.3	4.4± 0.4	4.4± 0.3	4.4± 0.3	4.5± 0.4	4.6± 0.4	4.3± 0.3
2000 ppm	4.5± 0.2	4.4± 0.2	4.5± 0.2	4.4± 0.3	4.3± 0.2	4.4± 0.2	4.1± 0.3**
4000 ppm	4.5± 0.2	4.5± 0.2	4.9± 0.2**	5.1± 0.3**	4.9± 0.5	5.0± 0.6	4.5± 0.3
8000 ppm	3.8± 0.4**	4.6± 0.3	4.8± 0.4**	4.8± 0.4	4.9± 0.3	4.9± 0.4	4.6± 0.4

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-6(6)
Control	4.6± 0.3	4.6± 0.3	4.5± 0.2	4.6± 0.2	4.5± 0.2	4.5± 0.3
500 ppm	4.5± 0.2	4.6± 0.3	4.5± 0.3	4.6± 0.4	4.6± 0.4	4.7± 0.3
1000 ppm	4.7± 0.3	4.8± 0.5	4.6± 0.4	4.5± 0.3	4.5± 0.4	4.5± 0.3
2000 ppm	4.5± 0.4	4.5± 0.5	4.3± 0.4	4.5± 0.3	4.4± 0.4	4.5± 0.3
4000 ppm	5.1± 0.5*	4.7± 0.4	4.9± 0.4	4.8± 0.6	5.1± 0.6*	5.2± 0.3**
8000 ppm	5.1± 0.5*	4.7± 0.5	5.0± 0.5*	5.0± 0.5	5.0± 0.4	5.5± 0.4**

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

APPENDIX C 2

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	3.6± 0.2	3.8± 0.1	3.9± 0.2	4.2± 0.2	4.3± 0.2	4.4± 0.2	4.7± 0.2
500 ppm	3.8± 0.2	4.0± 0.2	4.3± 0.3**	4.5± 0.3*	4.6± 0.4	4.8± 0.4	5.0± 0.3*
1000 ppm	3.6± 0.3	4.0± 0.1	4.1± 0.1	4.3± 0.2	4.4± 0.2	4.7± 0.4	4.8± 0.4
2000 ppm	3.9± 0.3	4.2± 0.3**	4.2± 0.3**	4.2± 0.2	4.2± 0.3	4.5± 0.3	4.4± 0.2
4000 ppm	3.7± 0.3	3.9± 0.2	4.5± 0.4**	4.5± 0.3*	4.4± 0.4	4.5± 0.5	4.2± 0.3**
8000 ppm	3.3± 0.3*	3.8± 0.4	4.1± 0.2	4.2± 0.3	4.4± 0.4	4.3± 0.3	4.1± 0.3**

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-6(6)
Control	4.5± 0.3	4.4± 0.2	4.4± 0.1	4.5± 0.3	4.4± 0.3	4.5± 0.3
500 ppm	4.8± 0.2	4.9± 0.3*	4.7± 0.3	5.0± 0.3**	4.6± 0.3	5.0± 0.4
1000 ppm	4.8± 0.4*	4.9± 0.3*	4.4± 0.4	4.6± 0.4	4.5± 0.4	4.5± 0.4
2000 ppm	4.7± 0.2	4.8± 0.4*	4.4± 0.3	4.6± 0.3	4.6± 0.5	4.8± 0.3
4000 ppm	4.5± 0.4	4.4± 0.3	4.5± 0.3	4.5± 0.4	4.2± 0.4	4.7± 0.6
8000 ppm	4.3± 0.3	4.1± 0.3	4.1± 0.3	4.2± 0.4	4.3± 0.5	4.5± 0.5

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

APPENDIX D 1

HEMATOLOGY : SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-7
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$		HEMOGLOBIN g/dℓ		HEMATOCRIT %		MCV f ℓ		MCH p g		MCHC g/dℓ		PLATELET $10^3/\mu\ell$	
Control	10	10.76±	0.25	15.8±	0.4	49.4±	1.5	45.9±	0.7	14.7±	0.3	32.1±	0.7	1405±	62
500 ppm	10	11.02±	0.31	16.7±	0.5**	52.0±	1.8**	47.1±	0.5**	15.2±	0.1	32.2±	0.5	1427±	116
1000 ppm	10	10.92±	0.31	16.5±	0.4**	50.9±	1.6	46.6±	0.8*	15.1±	0.4	32.5±	0.5	1439±	107
2000 ppm	10	10.79±	0.17	16.6±	0.3**	51.1±	1.1	47.4±	0.7**	15.4±	0.3**	32.5±	0.4	1285±	434
4000 ppm	10	10.58±	0.32	16.4±	0.3**	50.2±	1.3	47.5±	0.3**	15.5±	0.2**	32.7±	0.4	1344±	77
8000 ppm	10	10.30±	0.36**	16.0±	0.5	49.9±	2.0	48.4±	0.4**	15.5±	0.2**	32.1±	0.4	1535±	95*

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-7
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHERS
Control	10	1.60± 0.95	0± 0	17± 5	2± 2	0± 0	4± 2	77± 6	0± 0
500 ppm	10	1.72± 1.08	0± 0	15± 4	2± 2	0± 0	3± 2	80± 6	0± 0
1000 ppm	10	1.51± 1.14	0± 0	16± 4	1± 1	0± 0	3± 2	80± 4	0± 0
2000 ppm	10	1.45± 0.88	0± 0	14± 7	1± 2	0± 0	3± 2	81± 6	0± 0
4000 ppm	10	1.18± 0.91	0± 0	16± 5	1± 2	0± 0	4± 2	79± 6	0± 0
8000 ppm	10	1.18± 0.86	0± 0	19± 8	1± 1	0± 0	4± 2	78± 9	0± 0

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

APPENDIX D 2

HEMATOLOGY : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-7
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV fℓ	MCH pg	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	10	10.70± 0.59	16.1± 0.9	49.4± 2.9	46.1± 0.5	15.1± 0.3	32.7± 0.5	1216± 89
500 ppm	10	10.64± 0.29	16.8± 0.4	50.1± 1.6	47.1± 0.6**	15.8± 0.5**	33.5± 1.3	1297± 86
1000 ppm	10	10.75± 0.25	16.8± 0.4	50.5± 1.4	46.9± 0.5**	15.6± 0.2*	33.2± 0.5	1313± 75
2000 ppm	10	10.75± 0.34	16.8± 0.4	50.6± 1.8	47.0± 0.5**	15.6± 0.2*	33.2± 0.6	1283± 82
4000 ppm	10	10.48± 0.45	16.3± 0.6	48.8± 2.0	46.6± 0.6	15.5± 0.3	33.3± 0.6	1280± 58
8000 ppm	9	9.72± 0.71**	16.0± 0.4	46.5± 3.5*	47.9± 0.5**	16.5± 1.1**	34.5± 2.3**	1343± 146

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-7
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHERS
Control	10	0.88± 0.83	0± 0	24± 14	0± 1	0± 0	2± 1	74± 14	0± 0
500 ppm	10	0.84± 0.82	0± 0	21± 8	0± 0	0± 0	2± 2	77± 7	0± 0
1000 ppm	10	0.82± 0.81	0± 0	19± 4	0± 1	0± 0	2± 1	78± 5	0± 0
2000 ppm	10	1.26± 0.97	0± 0	17± 9	1± 1	0± 0	2± 1	80± 8	0± 0
4000 ppm	10	0.86± 0.60	0± 0	15± 7	1± 1	0± 0	4± 3	80± 7	0± 0
8000 ppm	9	0.86± 0.44	0± 0	23± 18	1± 1	0± 0	3± 2	73± 17	0± 0

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

(HCL070)

APPENDIX E 1

BIOCHEMISTRY : SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 014-1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (13)

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	10	5.4± 0.1	3.0± 0.1	1.3± 0.0	0.40± 0.12	226± 63	78± 5	74± 14
500 ppm	10	5.4± 0.2	3.1± 0.1	1.3± 0.1	0.37± 0.12	191± 43	69± 8	58± 13
1000 ppm	10	5.2± 0.2	3.0± 0.1	1.4± 0.1	0.38± 0.09	191± 47	67± 11*	54± 13*
2000 ppm	10	5.2± 0.2	3.0± 0.2	1.4± 0.2**	0.34± 0.08	211± 40	68± 8*	60± 16
4000 ppm	10	5.1± 0.3*	3.0± 0.2	1.4± 0.1*	0.39± 0.11	227± 47	67± 13*	59± 20
8000 ppm	10	5.1± 0.3*	2.9± 0.2	1.4± 0.1*	0.40± 0.14	224± 44	73± 7	48± 10**

Significant defference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 014-1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	GOT IU/ℓ		GPT IU/ℓ		LDH IU/ℓ		ALP IU/ℓ		CPK IU/ℓ		UREA NITROGEN mg/dℓ		SODIUM mEq/ℓ	
Control	10	53±	9	18±	2	217±	25	177±	16	43±	7	26.1±	5.2	154±	1
500 ppm	10	54±	12	18±	2	228±	28	189±	12	48±	9	23.5±	4.0	154±	1
1000 ppm	10	50±	9	18±	2	213±	36	177±	7	47±	16	24.6±	6.5	154±	2
2000 ppm	10	46±	6	20±	7	208±	42	182±	12	47±	18	24.3±	5.1	154±	1
4000 ppm	10	47±	5	18±	3	213±	17	187±	14	41±	10	20.5±	3.1*	155±	2
8000 ppm	10	44±	4	17±	2	183±	24	168±	28	41±	10	17.0±	2.4**	155±	2

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 014-1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	10	4.6±	0.5	123±	3	8.8±	0.3	7.6±	1.2
500 ppm	10	4.5±	0.3	123±	2	8.7±	0.3	7.5±	0.9
1000 ppm	10	4.5±	0.5	123±	2	8.7±	0.3	7.5±	0.8
2000 ppm	10	4.6±	0.6	123±	3	8.7±	0.3	7.7±	1.6
4000 ppm	10	4.3±	0.5	124±	3	8.7±	0.3	7.7±	0.5
8000 ppm	10	4.4±	0.5	124±	2	8.8±	0.3	7.8±	1.2

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

APPENDIX E 2

BIOCHEMISTRY : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 014-1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (13)

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	10	5.5± 0.2	3.4± 0.1	1.5± 0.1	0.30± 0.09	184± 29	71± 11	49± 15
500 ppm	10	5.6± 0.2	3.4± 0.1	1.6± 0.1	0.32± 0.07	188± 28	61± 6*	41± 8
1000 ppm	10	5.6± 0.2	3.5± 0.2	1.6± 0.1	0.35± 0.08	179± 30	59± 7*	42± 8
2000 ppm	10	5.5± 0.2	3.4± 0.1	1.6± 0.1	0.36± 0.12	182± 37	62± 9	45± 9
4000 ppm	10	5.2± 0.1**	3.2± 0.1	1.6± 0.1	0.31± 0.11	174± 30	63± 6	44± 7
8000 ppm	9	5.1± 0.2**	3.2± 0.1*	1.6± 0.1	0.37± 0.11	194± 36	71± 7	48± 9

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 014-1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	GOT IU/ℓ	GPT IU/ℓ	LDH IU/ℓ	ALP IU/ℓ	CPK IU/ℓ	UREA NITROGEN mg/dℓ	SODIUM mEq/ℓ
Control	10	72± 28	21± 4	281± 144	307± 38	88± 102	21.1± 4.3	154± 2
500 ppm	10	66± 10	22± 3	271± 62	309± 34	63± 24	21.2± 3.3	154± 1
1000 ppm	10	70± 11	25± 5	261± 61	317± 28	77± 50	20.8± 2.6	154± 1
2000 ppm	10	61± 9	24± 4	230± 45	289± 37	55± 32	20.5± 2.1	155± 1
4000 ppm	10	62± 7	24± 4	236± 36	270± 23	46± 13	16.6± 2.5**	155± 2
8000 ppm	9	81± 47	29± 10	276± 115	275± 29	70± 46	16.3± 3.0**	155± 2

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 014-1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	10	4.4±	0.4	122±	3	8.8±	0.3	7.6±	1.0
500 ppm	10	4.4±	0.3	124±	2	8.8±	0.3	7.2±	0.5
1000 ppm	10	4.3±	0.3	122±	4	8.7±	0.3	6.8±	0.6
2000 ppm	10	4.2±	0.6	123±	3	8.8±	0.3	7.1±	1.0
4000 ppm	10	4.1±	0.6	122±	3	8.8±	0.3	6.9±	1.2
8000 ppm	9	4.0±	0.5	123±	3	8.7±	0.3	8.5±	1.2

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

APPENDIX F 1

URINALYSIS : SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258 URINALYSIS
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-3
SEX : MALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	10	0	0	0	1	2	4	3		0	1	8	1	0	0		10	0	0	0	0	0		0	6	3	1	0	0		10	0	0	0	0	
500 ppm	10	0	0	2	1	4	3	0		0	2	7	1	0	0		10	0	0	0	0	0		0	6	3	1	0	0		10	0	0	0	0	
1000 ppm	10	0	0	0	0	2	7	1		0	2	7	1	0	0		10	0	0	0	0	0		0	7	3	0	0	0		10	0	0	0	0	
2000 ppm	10	0	0	1	0	1	7	1		0	2	8	0	0	0		10	0	0	0	0	0		0	6	4	0	0	0		10	0	0	0	0	
4000 ppm	10	0	0	1	0	1	6	2		0	1	9	0	0	0		10	0	0	0	0	0		3	6	1	0	0	0		10	0	0	0	0	
8000 ppm	10	0	0	0	1	3	5	1		0	3	6	1	0	0		10	0	0	0	0	0		1	7	2	0	0	0		9	1	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	10	10	0	0	0	0	
500 ppm	10	10	0	0	0	0	
1000 ppm	10	10	0	0	0	0	
2000 ppm	10	10	0	0	0	0	
4000 ppm	10	10	0	0	0	0	
8000 ppm	10	10	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

APPENDIX F 2

URINALYSIS : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-3
SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	10	0	0	2	0	5	3	0		0	3	7	0	0	0		10	0	0	0	0	0		0	8	2	0	0	0		10	0	0	0	0	
500 ppm	10	0	0	1	2	4	3	0		0	8	2	0	0	0	*	10	0	0	0	0	0		0	10	0	0	0	0		10	0	0	0	0	
1000 ppm	10	0	0	0	0	5	5	0		0	3	7	0	0	0		10	0	0	0	0	0		1	9	0	0	0	0		10	0	0	0	0	
2000 ppm	10	0	0	0	0	2	7	1		0	4	6	0	0	0		10	0	0	0	0	0		1	9	0	0	0	0		10	0	0	0	0	
4000 ppm	10	0	0	1	1	0	8	0	*	0	6	4	0	0	0		10	0	0	0	0	0		2	8	0	0	0	0		10	0	0	0	0	
8000 ppm	9	0	3	1	1	1	2	1		0	8	1	0	0	0	**	9	0	0	0	0	0		1	8	0	0	0	0		9	0	0	0	0	

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

(HCL101)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
SAMPLING DATE : 013-3
SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	10	10	0	0	0	0	
500 ppm	10	10	0	0	0	0	
1000 ppm	10	10	0	0	0	0	
2000 ppm	10	10	0	0	0	0	
4000 ppm	10	10	0	0	0	0	
8000 ppm	9	9	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

APPENDIX G 1

GROSS FINDINGS : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (13W)

Organ	Findings	Group Name / NO. of Animals	Control 10 (%)	500 ppm 10 (%)	1000 ppm 10 (%)	2000 ppm 10 (%)
skin/app	scab		0 (0)	0 (0)	0 (0)	0 (0)
spleen	black zone		0 (0)	0 (0)	3 (30)	1 (10)
kidney	hydronephrosis		0 (0)	0 (0)	0 (0)	0 (0)
testis	atrophic		0 (0)	0 (0)	1 (10)	0 (0)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (13W)

Organ	Findings	Group Name	4000 ppm	8000 ppm
		NO. of Animals	10 (%)	10 (%)
skin/app	scab		0 (0)	1 (10)
spleen	black zone		0 (0)	0 (0)
kidney	hydronephrosis		1 (10)	0 (0)
testis	atrophic		0 (0)	0 (0)

APPENDIX G 2

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

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 13W)

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	500 ppm 0 (%)	1000 ppm 0 (%)	2000 ppm 0 (%)
lung	red		- (-)	- (-)	- (-)	- (-)
pleura	deformed		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 13W)

Organ	Findings	Group Name	4000 ppm	8000 ppm
		NO. of Animals	0 (%)	1 (%)
lung	red		- (-)	1 (100)
pleura	deformed		- (-)	1 (100)

APPENDIX G 3

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (13W)

Organ	Findings	Group Name	Control	500 ppm	1000 ppm	2000 ppm
		NO. of Animals	10 (%)	10 (%)	10 (%)	10 (%)
spleen	black zone		2 (20)	2 (20)	1 (10)	0 (0)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (13W)

Organ	Findings	Group Name	4000 ppm	8000 ppm
		NO. of Animals	10 (%)	9 (%)
spleen	black zone		0 (0)	1 (11)

APPENDIX H 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	29.5± 1.5	0.035± 0.006	0.007± 0.002	0.186± 0.039	0.161± 0.009	0.153± 0.012
500 ppm	10	28.4± 1.7	0.038± 0.007	0.006± 0.001	0.194± 0.033	0.162± 0.012	0.155± 0.006
1000 ppm	10	28.0± 2.3	0.036± 0.006	0.006± 0.001	0.197± 0.046	0.161± 0.015	0.156± 0.006
2000 ppm	10	28.3± 2.3	0.034± 0.004	0.006± 0.002	0.210± 0.016	0.154± 0.012	0.160± 0.006
4000 ppm	10	29.5± 1.6	0.039± 0.003	0.008± 0.001	0.191± 0.016	0.156± 0.010	0.165± 0.011
8000 ppm	10	28.2± 1.7	0.030± 0.004	0.008± 0.002	0.162± 0.025	0.162± 0.013	0.183± 0.015**

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.449± 0.020	0.047± 0.005	1.185± 0.071	0.438± 0.014
500 ppm	10	0.442± 0.023	0.045± 0.005	1.192± 0.091	0.441± 0.009
1000 ppm	10	0.445± 0.029	0.045± 0.005	1.178± 0.079	0.438± 0.009
2000 ppm	10	0.432± 0.025	0.047± 0.004	1.224± 0.079	0.442± 0.006
4000 ppm	10	0.530± 0.288	0.048± 0.007	1.304± 0.088*	0.443± 0.023
8000 ppm	10	0.511± 0.049	0.044± 0.007	1.422± 0.131**	0.460± 0.018*

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

APPENDIX H 2

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	10	22.0± 1.6	0.042± 0.006	0.011± 0.003	0.025± 0.004	0.130± 0.007	0.151± 0.009
500 ppm	10	22.1± 0.8	0.043± 0.007	0.011± 0.002	0.026± 0.007	0.135± 0.008	0.150± 0.007
1000 ppm	10	21.5± 0.8	0.041± 0.006	0.011± 0.002	0.026± 0.003	0.132± 0.007	0.153± 0.007
2000 ppm	10	22.0± 1.3	0.046± 0.006	0.010± 0.001	0.024± 0.004	0.129± 0.009	0.161± 0.011
4000 ppm	10	22.0± 0.9	0.041± 0.005	0.009± 0.001*	0.022± 0.004	0.121± 0.006	0.161± 0.012
8000 ppm	9	20.7± 1.1	0.036± 0.006	0.010± 0.001	0.020± 0.004	0.123± 0.010	0.159± 0.013

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.302± 0.015	0.056± 0.008	0.962± 0.087	0.452± 0.013
500 ppm	10	0.309± 0.011	0.055± 0.006	1.001± 0.041	0.455± 0.006
1000 ppm	10	0.301± 0.014	0.053± 0.006	0.975± 0.041	0.450± 0.012
2000 ppm	10	0.305± 0.016	0.058± 0.009	1.032± 0.072	0.449± 0.014
4000 ppm	10	0.302± 0.014	0.053± 0.005	1.073± 0.056**	0.441± 0.012
8000 ppm	9	0.326± 0.018**	0.041± 0.005**	1.191± 0.092**	0.453± 0.013

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

APPENDIX I 1

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	29.5± 1.5	0.121± 0.022	0.023± 0.006	0.633± 0.126	0.546± 0.045	0.520± 0.061
500 ppm	10	28.4± 1.7	0.133± 0.021	0.023± 0.005	0.682± 0.117	0.569± 0.046	0.546± 0.037
1000 ppm	10	28.0± 2.3	0.129± 0.013	0.023± 0.004	0.701± 0.144	0.575± 0.036	0.560± 0.045
2000 ppm	10	28.3± 2.3	0.121± 0.014	0.022± 0.007	0.745± 0.082	0.545± 0.046	0.568± 0.042
4000 ppm	10	29.5± 1.6	0.131± 0.009	0.026± 0.006	0.650± 0.046	0.529± 0.039	0.561± 0.036
8000 ppm	10	28.2± 1.7	0.105± 0.013	0.028± 0.008	0.576± 0.100	0.575± 0.025	0.650± 0.045**

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	1.526± 0.102	0.160± 0.018	4.021± 0.155	1.490± 0.104
500 ppm	10	1.558± 0.085	0.159± 0.016	4.194± 0.258	1.556± 0.092
1000 ppm	10	1.593± 0.098	0.163± 0.016	4.217± 0.138	1.577± 0.144
2000 ppm	10	1.531± 0.096	0.167± 0.013	4.331± 0.175*	1.572± 0.125
4000 ppm	10	1.807± 1.015	0.164± 0.023	4.429± 0.252**	1.508± 0.106
8000 ppm	10	1.810± 0.090**	0.155± 0.023	5.044± 0.289**	1.637± 0.096

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

APPENDIX I 2

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	10	22.0± 1.6	0.189± 0.017	0.051± 0.008	0.113± 0.020	0.594± 0.032	0.690± 0.045
500 ppm	10	22.1± 0.8	0.194± 0.027	0.050± 0.008	0.119± 0.027	0.612± 0.031	0.677± 0.036
1000 ppm	10	21.5± 0.8	0.189± 0.023	0.053± 0.008	0.121± 0.013	0.613± 0.037	0.711± 0.043
2000 ppm	10	22.0± 1.3	0.211± 0.024	0.046± 0.006	0.109± 0.021	0.586± 0.031	0.731± 0.047
4000 ppm	10	22.0± 0.9	0.184± 0.022	0.039± 0.005**	0.102± 0.018	0.550± 0.024*	0.730± 0.049
8000 ppm	9	20.7± 1.1	0.173± 0.027	0.047± 0.005	0.098± 0.017	0.596± 0.040	0.765± 0.042**

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

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (13)

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	1.379± 0.063	0.255± 0.019	4.375± 0.165	2.066± 0.163
500 ppm	10	1.402± 0.066	0.248± 0.020	4.528± 0.055	2.062± 0.077
1000 ppm	10	1.401± 0.048	0.244± 0.022	4.537± 0.087	2.096± 0.082
2000 ppm	10	1.387± 0.036	0.265± 0.031	4.696± 0.135**	2.046± 0.114
4000 ppm	10	1.368± 0.054	0.241± 0.018	4.869± 0.170**	2.003± 0.064
8000 ppm	9	1.574± 0.077**	0.200± 0.018**	5.748± 0.304**	2.189± 0.098

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

APPENDIX J 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (13W)

Organ	Findings	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	10				10				10				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
[Integumentary system/appandage]																		
skin/app			<10>				<10>				<10>				<10>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Respiratory system]																		
lung			<10>				<10>				<10>				<10>			
	hemorrhage		1	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(40)	(0)	(0)	(0)
[Hematopoietic system]																		
spleen			<10>				<10>				<10>				<10>			
	deposit of melanin		0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
[Digestive system]																		
liver			<10>				<10>				<10>				<10>			
	vacuolic change:peripheral		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	4000 ppm				8000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Integumentary system/appandage]										
skin/app			<10>				<10>			
	inflammation		0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
[Respiratory system]										
lung			<10>				<10>			
	hemorrhage		2	0	0	0	2	0	0	0
			(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
[Hematopoietic system]										
spleen			<10>				<10>			
	deposit of melanin		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Digestive system]										
liver			<10>				<10>			
	vacuolic change:peripheral		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control				500 ppm				1000 ppm				2000 ppm			
			10				10				10				10			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Urinary system]																		
kidney			<10>				<10>				<10>				<10>			
	basophilic change		1 (10)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory polyp		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	vacuolization of proximal tubule		9 (90)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 ** (0)	1 (10)	0 (0)	0 (0)	0 ** (0)	0 (0)	0 (0)	0 (0)	0 ** (0)
	hydronephrosis		0 (0)	0 (0)	0 (0)	0 (0)	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]																		
pituitary			<10>				<10>				<10>				<10>			
	cyst		2 (20)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	4000 ppm				8000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Urinary system]										
kidney			<10>				<10>			
	basophilic change		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	inflammatory polyp		1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	vacuolization of proximal tubule		0	0	0	0 **	0	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hydronephrosis		0	0	1	0	0	0	0	0
			(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)
[Endocrine system]										
pituitary			<10>				<10>			
	cyst		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX J 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 13W)

Organ	Findings	Group Name	Control				500 ppm				1000 ppm				2000 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]																		
lung			< 0>				< 0>				< 0>				< 0>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hemorrhage		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Digestive system]																		
liver			< 0>				< 0>				< 0>				< 0>			
	vacuolic change:peripheral		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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. : 0258
ANIMAL : MOUSE BDF1
REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0- 13W)

Organ	Findings	Group Name	4000 ppm				8000 ppm			
		No. of Animals on Study	0				1			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]										
lung			< 0>				< 1>			
	congestion		-	-	-	-	0	0	1	0
			(-)	(-)	(-)	(-)	(0)	(0)	(100)	(0)
	hemorrhage		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
[Digestive system]										
liver			< 0>				< 1>			
	vacuolic change:peripheral		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)

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

APPENDIX J 3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(13-WEEK STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 10				500 ppm 10				1000 ppm 10				2000 ppm 10			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Respiratory system]																		
nasal cavit			<10>				<10>				<10>				<10>			
	eosinophilic change: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)
	eosinophilic change:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
lung			<10>				<10>				<10>				<10>			
	hemorrhage		1 (10)	0 (0)	0 (0)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)
[Hematopoietic system]																		
spleen			<10>				<10>				<10>				<10>			
	deposit of melanin		2 (20)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Digestive system]																		
liver			<10>				<10>				<10>				<10>			
	granulation		1 (10)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	4000 ppm				8000 ppm			
		No. of Animals on Study	10				9			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]										
nasal cavit			<10>				< 9>			
	eosinophilic change:olfactory epithelium		1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium		0	1	0	0	0	0	0	0
			(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)
lung			<10>				< 9>			
	hemorrhage		2	0	0	0	2	0	0	0
			(20)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
[Hematopoietic system]										
spleen			<10>				< 9>			
	deposit of melanin		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
[Digestive system]										
liver			<10>				< 9>			
	granulation		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	10				10				10				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Digestive system]																		
liver			<10>				<10>				<10>				<10>			
	vacuolic change:peripheral		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)	(50)	(0)	(0)	(0)
[Endocrine system]																		
thyroid			<10>				<10>				<10>				<10>			
	ultimibranchial body remanet		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	4000 ppm				8000 ppm			
		No. of Animals on Study	10				9			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Digestive system]										
liver			<10>				< 9>			
	vacuolic change:peripheral		10	0	0	0 **	2	7	0	0 **
			(100)	(0)	(0)	(0)	(22)	(78)	(0)	(0)
[Endocrine system]										
thyroid			<10>				< 9>			
	ultimibranchial body remanet		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX K 1

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : ALL ANIMALS

(13-WEEK STUDY)

STUDY NO. : 0258
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0- 13W)

Organ	Findings	Group Name	Control	500 ppm	1000 ppm	2000 ppm
		No. of animals on Study	10	10	10	10
[Respiratory system]						
lung			<10>	<10>	<10>	<10>
	bronchiolar-alveolar adenoma		0 (0%)	0 (0%)	0 (0%)	0 (0%)

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

Organ	Findings	Group Name	4000 ppm	8000 ppm
		No. of animals on Study	10	10
[Respiratory system]				
lung			<10>	<10>
	bronchiolar-alveolar adenoma		0 (0%)	1 (10%)

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

APPENDIX L 1

IDENTITY OF DICHLOROMETHANE IN THE 13-WEEK INHALATION STUDY

IDENTITY OF DICHLOROMETHANE IN THE 13-WEEK INHALATION STUDY

A. Lot No. APR5259

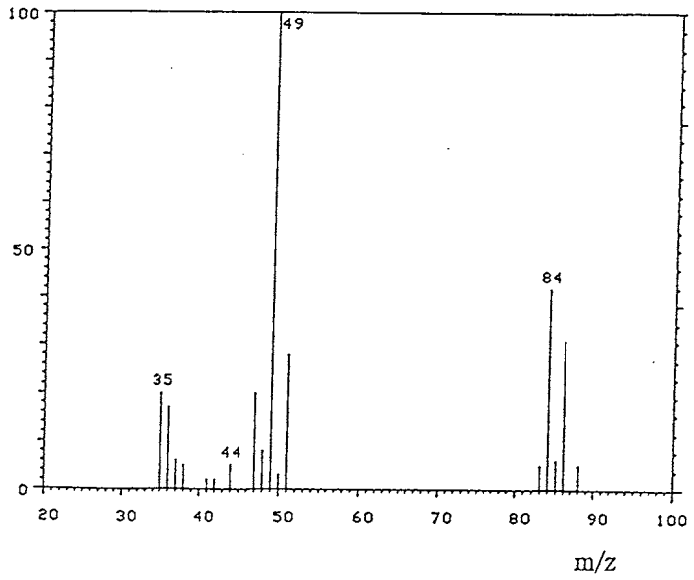
1. Spectral data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI(Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance

Results: The mass spectrum was consistent with literature spectrum.

Determined Values Fragment Peak(m/z)	Literature Values* Fragment Peak(m/z)
35	35
49	49
84	84

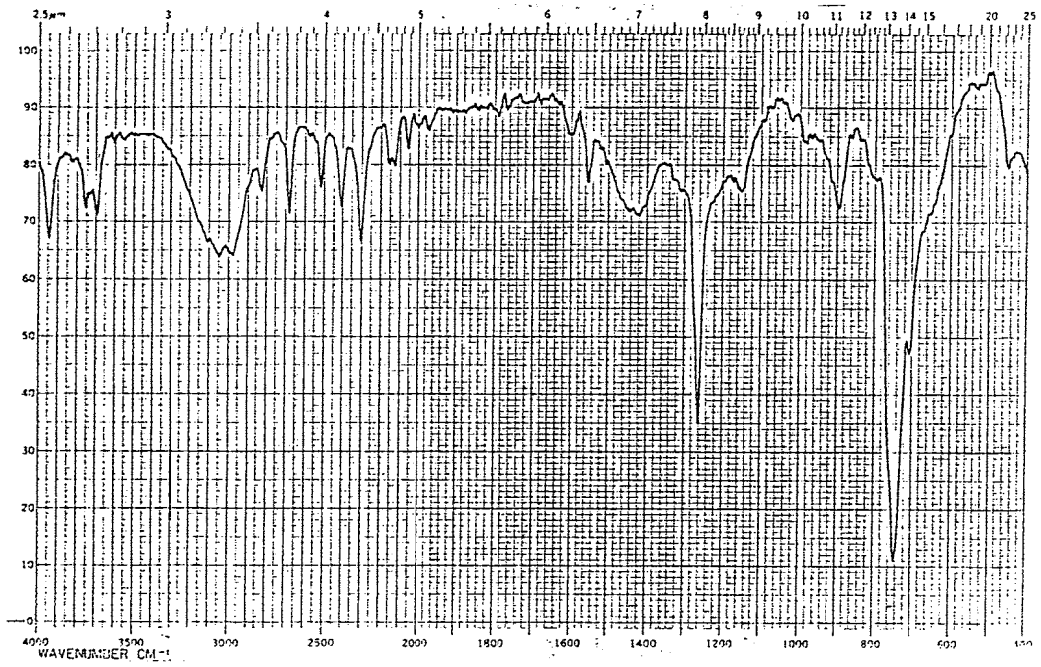
(*EPA/NIH Mass Spectral Data Base (1978) Vol. 1, p. 33.)

Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr Liquid Cell

Slit : Medium



Infrared Spectrum of Test Substance

Results: The infrared spectrum was consistent with literature spectrum.

Determined Values	Literature Values*
Wave Number(cm^{-1})	Wave Number(cm^{-1})
430～ 480	
650～ 840	650～ 850
870～ 940	870～ 940
970～1000	970～1000
1120～1180	1130～1180
1200～1340	1200～1350
1370～1500	1380～1500
1530～1570	1540～1570
1580～1630	1580～1630
2040～2090	2050～2090
2100～2190	2120～2190
2250～2360	2280～2370
2380～2460	2400～2460
2500～2550	2500～2560
2650～2730	2650～2730
2800～2860	2800～2860
2900～3200	2900～3200
3650～3730	3670～3750
3730～3800	3750～3800
3900～4000	3900～4000

(*Performed by the WAKO PURE CHEMICAL INDUSTRIES, LTD.)

2. Conclusions: The test substance was identified as dichloromethane, by the mass spectrum and the infrared spectrum.

B. Lot No. APR5260

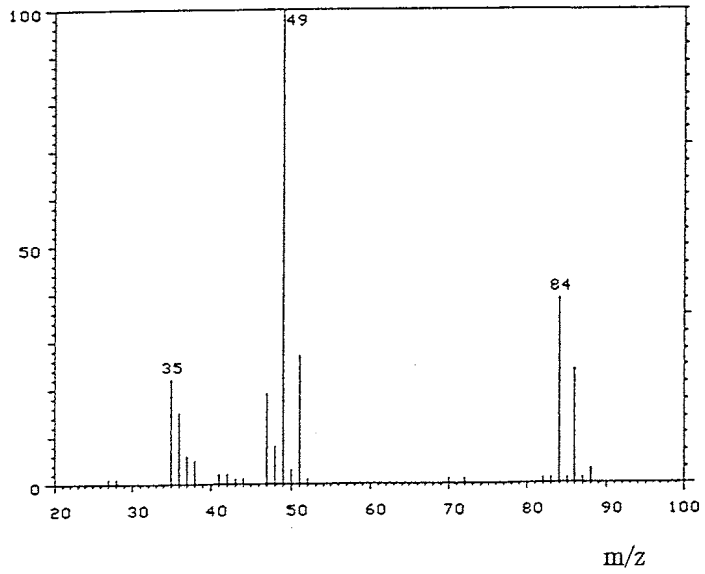
1. Spectral data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI(Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance

Results: The mass spectrum was consistent with literature spectrum.

Determined Values Fragment Peak(m/z)	Literature Values* Fragment Peak(m/z)
35	35
49	49
84	84

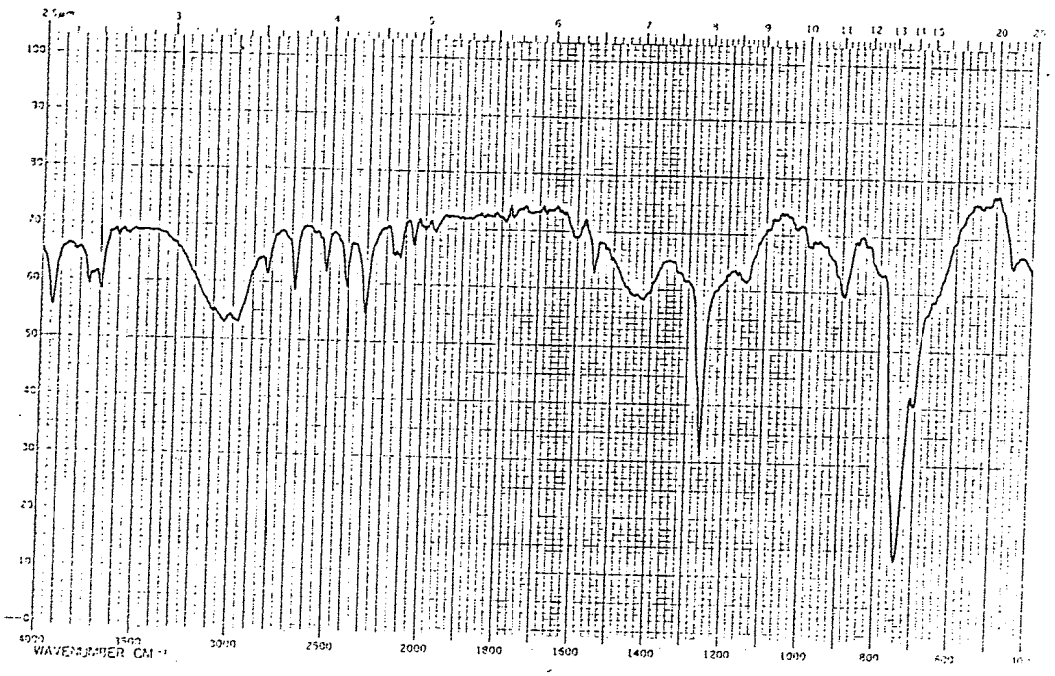
(*EPA/NIH Mass Spectral Data Base (1978) Vol. 1, p. 33.)

Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr Liquid Cell

Slit : Medium



Infrared Spectrum of Test Substance

Results: The infrared spectrum was consistent with literature spectrum.

Determined Values Wave Number(cm^{-1})	Literature Values* Wave Number(cm^{-1})
430～ 480	
650～ 840	650～ 850
870～ 940	870～ 940
970～1000	970～1000
1120～1180	1130～1180
1200～1340	1200～1350
1370～1500	1380～1500
1530～1570	1540～1570
1580～1630	1580～1630
2040～2090	2050～2090
2100～2190	2120～2190
2250～2360	2280～2370
2380～2460	2400～2460
2500～2550	2500～2560
2650～2730	2650～2730
2800～2860	2800～2860
2900～3200	2900～3200
3650～3730	3670～3750
3730～3800	3750～3800
3900～4000	3900～4000

(*Performed by the WAKO PURE CHEMICAL INDUSTRIES, LTD.)

2. Conclusions: The test substance was identified as dichloromethane, by the mass spectrum and the infrared spectrum.

APPENDIX L 2

STABILITY OF DICHLOROMETHANE IN THE 13-WEEK INHALATION STUDY

STABILITY OF DICHLOROMETHANE IN THE 13-WEEK INHALATION STUDY

A. Lot No. APR5259

1. Sample: This lot was used from 1994.1.25 to 1994.2.4. Test substance was stored in a dark place at room temperature.

2. Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr Liquid Cell

Slit : Medium

Results: The result of infrared spectrum did not change when before and after the lot of study.

1994.01.11(date analyzed)	1994.02.08(date analyzed)
Wave Number(cm^{-1})	Wave Number(cm^{-1})
430～ 480	430～ 480
650～ 840	650～ 840
870～ 940	870～ 940
970～1000	970～1000
1120～1180	1120～1180
1200～1340	1200～1340
1370～1500	1370～1500
1530～1570	1530～1570
1580～1630	1580～1630
2040～2090	2040～2090
2100～2190	2100～2190
2250～2360	2250～2360
2380～2460	2380～2460
2500～2550	2500～2550
2650～2730	2650～2730
2800～2860	2800～2860
2900～3200	2900～3200
3650～3730	3650～3730
3730～3800	3730～3800
3900～4000	3900～4000

3. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone(0.2 mmϕ × 50 m)

Column Temperature : 60 °C

Flow Rate : 1 ml/min

Detector : FID(Flame Ionization Detector)

Injection Volume : 1 μl

Results: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No.2 < 1% of total area) analyzed at 1994.1.11and one major peak (peak No.1) and one impurity (peak No.2 < 1% of total area) analyzed at 1994.2.8. No new trace impurity peak in the test substance analyzed at 1994.2.8 was detected.

Date (date analyzed)	Peak No.	Retention Time(min)	Area Count
1994.01.11	1	3.303	64234
	2	3.41	10
1994.02.08	1	3.302	64221
	2	3.407	8

4. Conclusions: The test substance was stable for about 1 month in a dark place at room temperature.

B. Lot No. APR5260

1. Sample: This lot was used from 1994.2.7 to 1994.4.25 Test substance was stored in a dark place at room temperature.

2. Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr Liquid Cell

Slit : Medium

Results: The result of infrared spectrum did not change when before and after the lot of study.

1994.02.01(date analyzed)	1994.04.28(date analyzed)
Wave Number(cm^{-1})	Wave Number(cm^{-1})
430～ 480	430～ 480
650～ 840	650～ 840
870～ 940	870～ 940
970～1000	970～1000
1120～1180	1120～1180
1200～1340	1200～1340
1370～1500	1370～1500
1530～1570	1530～1570
1580～1630	1580～1630
2040～2090	2040～2090
2100～2190	2100～2190
2250～2360	2250～2360
2380～2460	2380～2460
2500～2550	2500～2550
2650～2730	2650～2730
2800～2860	2800～2860
2900～3200	2900～3200
3650～3730	3650～3730
3730～3800	3730～3800
3900～4000	3900～4000

3. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone(0.2 mmϕ × 50 m)

Column Temperature : 60 °C

Flow Rate : 1 ml/min

Detector : FID(Flame Ionization Detector)

Injection Volume : 1 μl

Results: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No.2 < 1% of total area) analyzed at 1994.2.1and one major peak (peak No.1) and one impurity (peak No.2 < 1% of total area) analyzed at 1994.4.28. No new trace impurity peak in the test substance analyzed at 1994.4.28 was detected.

Date (date analyzed)	Peak No.	Retention Time(min)	Area Count
1994.02.01	1	3.305	65049
	2	3.41	7
1994.04.28	1	3.302	64232
	2	3.407	9

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

APPENDIX M 1

CONCENTRATION OF DICHLOROMETHANE IN THE INHALATION CHAMBER OF THE 13-WEEK INHALATION STUDY

CONCENTRATION OF DICHLOROMETHANE IN INHALATION CHAMBER

Group Name	Concentration(ppm) Mean ± S.D.
Control	0.0 ± 0.0
500ppm	501.9 ± 1.3
1,000ppm	1,007.8 ± 3.7
2,000ppm	2,000.9 ± 8.8
4,000ppm	4,002.6 ± 10.0
8,000ppm	8,001.3 ± 22.0

APPENDIX M 2

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER

IN THE 13-WEEK INHALATION STUDY OF DICHLOROMETHANE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 13-WEEK INHALATION STUDY OF DICHLOROMETHANE

Group Name	Temperature(°C) Mean ± S.D.	Humidity(%) Mean ± S.D.	Ventilation Rate(L/min) Mean ± S.D.	Room Air Change(time/h) Mean
Control	22.1 ± 0.1	55.9 ± 0.8	103.9 ± 0.2	12.0
500ppm	20.9 ± 0.1	57.2 ± 1.4	104.2 ± 0.3	12.0
1,000ppm	21.1 ± 0.1	56.6 ± 1.1	104.2 ± 0.2	12.0
2,000ppm	21.2 ± 0.1	55.9 ± 1.0	104.4 ± 0.2	12.0
4,000ppm	21.2 ± 0.3	54.8 ± 0.9	104.3 ± 0.1	12.0
8,000ppm	21.0 ± 0.1	54.8 ± 0.6	104.0 ± 0.3	12.0

APPENDIX N 1

METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 13-WEEK INHALATION STUDY OF DICHLOROMETHANE

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 13-WEEK INHALATION STUDY OF DICHLOROMETHANE

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] (May-Grunwald-Giemsa staining)
Biochemistry	
Total protein (TP)	Biuret method [3]
Albumin (Alb)	BCG method [3]
A/G ratio	Calculated as Alb/(TP-Alb) [3]
T-bilirubin	Michaelson method [3]
Glucose	Enzymatic method (HK·G-6-PDH) [3]
T-cholesterol	Enzymatic method (CEH·COD·POD) [3]
Triglyceride	Enzymatic method (GK·GPO·POD) [3]
Glutamic oxaloacetic transaminase (GOT)	UV·Rate method [3]
Glutamic pyruvic transaminase (GPT)	UV·Rate method [3]
Lactate dehydrogenase (LDH)	UV·Rate method [3]
Alkaline phosphatase (ALP)	p-Nitrophenylphosphate method [3]
Creatine phosphokinase (CPK)	UV·Rate method [3]
Urea nitrogen	Enzymatic method (Urease·GLDH) [3]
Sodium	Flame photometry [4]
Potassium	Flame photometry [4]
Chloride	Coulometric titration [4]
Calcium	OCPC method [3]
Inorganic phosphorus	Enzymatic method (SPL·PGM·G-6-PDH) [3]
Urinalysis	
pH,Protein,Glucose,Ketone body,Occult Blood, Urobilinogen	Urinalysis reagent paper method [5]

1) Automatic blood cell analyzer (Technicon H·1 : Technicon Instruments Corporation,USA)
2) Automatic blood cell differential analyzer (Hitachi 8200 : Hitachi,Ltd.,Japan)
3) Automatic analyzer (Hitachi 705 : Hitachi,Ltd.,Japan)
4) Flame photometer (Hitachi 750 : Hitachi,Ltd.,Japan)
5) Ames reagent strips for urinalysis (Uro-Labstix : Miles-Sankyo Co.,Ltd.,Japan)

APPENDIX N 2

UNISTS AND DECIMAL PLACEFOR HEMAYOLOGY AND BIOCHEMISTRY IN THE 13-WEEK INHALATION STUDY OF DICHLOROMETHANE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 13-WEEK INHALATION STUDY OF DICHLOROMETHANE

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
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
γ -Glutamyl transpeptidase (γ -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