1ジクロロメタンのラットを用いた
吸入による2週間毒性試験報告書

試験番号：0229

APPENDIX

APPENDIXES

APPENDIXES (CONTINUED)

APPENDIX A 1

BODY WEIGHT CHANGES :SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-1	1-7	2-7
Control	113± 9	116± 8	134± 12	157± 11
1000ppm	114± 7	116± 7	138± 9	167± 12
2000ppm	114± 8	117± 9	135± 10	159± 13
4000ppm	114± 9	115± 10	134± 13	161± 16
8000ppm	113± 9	110± 9	120± 7*	138± 9**
16000ppm	113± 9	104± 0 ?	-	-

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

? : Significant test is not applied,because No. of data in this group is less than 3.

APPENDIX A 2

BODY WEIGHT CHANGES : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-1	1-7	2-7
Control	101± 3	102± 3	111± 5	125± 6
1000ppm	99± 4	100± 3	110± 4	122± 6
2000ppm	100± 4	101± 3	112± 5	125± 4
4000ppm	100± 3	101± 3	111± 4	125± 5
8000ppm	99± 3	95± 3**	98± 3**	110± 5**
16000ppm	99± 3	100± 2	-	-

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

APPENDIX B 1

FOOD CONSUMPTION CHANGES : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(7)	2-7(7)
Control	13.8± 1.5	14.2± 1.5
1000ppm	14.0± 1.2	15.3± 1.7
2000ppm	13.8± 1.1	14.4± 1.5
4000ppm	13.6± 1.2	14.3± 1.2
8000ppm	10.2± 0.6**	11.9± 0.8**
16000ppm	7.2± 0.0 ?	-

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

? : Significant test is not applied,because No. of data in this group is less than 3.

APPENDIX B 2

FOOD CONSUMPTION CHANGES : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration 1-7(7)	week-day(effective) 2-7(7)
Control	11.6± 0.9	11.8± 0.9
1000ppm	11.4± 1.0	11.5± 1.1
2000ppm	11.5± 0.6	11.6± 0.5
4000ppm	11.6± 0.6	11.7± 0.6
8000ppm	8.2± 0.6**	9.6± 0.8**
16000ppm	7.2± 0.0 ?	-

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

? : Significant test is not applied,because No. of data in this group is less than 3.

APPENDIX C 1

HEMATOLOGY : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 002-7
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$		HEMOGLOBIN g/dℓ		HEMATOCRIT %		MCV f ℓ		MCH p g		MCHC g/dℓ		PLATELET $10^3/\mu\ell$	
Control	5	7.93±	0.27	14.6±	0.5	42.9±	1.3	54.1±	0.4	18.4±	0.3	34.0±	0.4	701±	75
1000ppm	5	7.81±	0.10	14.8±	0.2	43.1±	0.7	55.2±	0.6*	18.9±	0.2*	34.3±	0.4	825±	95*
2000ppm	5	8.03±	0.16	15.2±	0.4	44.2±	1.0	55.1±	0.5*	18.9±	0.2*	34.3±	0.5	785±	42
4000ppm	5	7.68±	0.22	14.7±	0.6	42.4±	1.2	55.1±	0.6*	19.1±	0.3**	34.6±	0.6	796±	36
8000ppm	5	7.88±	0.12	14.6±	0.3	42.6±	0.4	54.1±	0.6	18.5±	0.2	34.3±	0.5	637±	64
16000ppm	0	-		-		-		-		-		-		-	

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 002-7
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	RETICULOCYTE ‰	PROTHROMBIN TIME sec	APTT sec
Control	5	42± 6	12.7± 0.4	20.3± 1.0
1000ppm	5	48± 9	12.6± 0.4	20.6± 1.1
2000ppm	5	41± 10	12.8± 0.4	20.8± 1.0
4000ppm	5	36± 4	12.7± 0.2	21.8± 0.8
8000ppm	5	36± 12	13.3± 0.2*	21.3± 0.5
16000ppm	0	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 002-7
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHERS
Control	5	1.35± 0.20	0± 0	25± 10	1± 1	0± 0	4± 0	69± 8	0± 0
1000ppm	5	1.44± 0.27	0± 1	27± 7	1± 1	0± 0	3± 1	68± 6	0± 0
2000ppm	5	1.64± 0.57	0± 0	24± 4	1± 1	0± 0	3± 1	72± 4	0± 0
4000ppm	5	1.75± 0.62	0± 0	22± 6	1± 0	0± 0	3± 2	73± 8	0± 0
8000ppm	5	1.82± 1.16	1± 1	33± 8	1± 1	0± 0	4± 2	62± 10	0± 1
16000ppm	0	-	-	-	-	-	-	-	-

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

APPENDIX C 2

HEMATOLOGY : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 002-7
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV fℓ	MCH pg	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	5	8.11± 0.24	15.4± 0.4	43.5± 1.3	53.7± 0.4	19.0± 0.4	35.4± 0.9	738± 69
1000ppm	5	8.53± 0.06**	16.2± 0.3*	46.3± 0.2**	54.3± 0.4	19.0± 0.4	34.9± 0.8	731± 71
2000ppm	5	8.33± 0.23	15.8± 0.4	45.0± 1.4	54.0± 0.3	18.9± 0.2	35.0± 0.4	737± 66
4000ppm	5	8.28± 0.19	15.7± 0.5	45.1± 1.1	54.4± 0.5	18.9± 0.3	34.8± 0.6	717± 105
8000ppm	5	7.97± 0.16	15.2± 0.3	43.1± 0.9	54.1± 0.9	19.1± 0.5	35.3± 1.1	664± 62
16000ppm	0	-	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 002-7
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	RETICULOCYTE ‰	PROTHROMBIN TIME sec	APTT sec
Control	5	26± 4	12.8± 0.5	18.6± 1.5
1000ppm	5	27± 7	12.9± 0.2	19.2± 1.0
2000ppm	5	29± 6	12.8± 0.3	20.2± 1.0
4000ppm	5	29± 3	12.8± 0.1	20.1± 1.0
8000ppm	5	33± 8	13.6± 0.3**	20.0± 1.2
16000ppm	0	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 002-7
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHERS
Control	5	1.32± 0.73	0± 1	23± 6	1± 1	0± 0	4± 1	72± 5	0± 0
1000ppm	5	1.61± 1.35	0± 0	24± 8	2± 1	0± 0	4± 1	70± 9	0± 0
2000ppm	5	1.36± 0.64	0± 0	30± 5	2± 1	0± 0	3± 1	65± 4	0± 0
4000ppm	5	1.87± 0.80	0± 0	33± 4	1± 1	0± 0	3± 1	62± 5	0± 1
8000ppm	5	1.15± 0.48	0± 0	43± 6**	2± 1	0± 0	5± 2	50± 8**	0± 0
16000ppm	0	-	-	-	-	-	-	-	-

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

APPENDIX D 1

BIOCHEMISTRY : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 003-1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (2)

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	5.8± 0.1	3.6± 0.0	1.7± 0.1	0.27± 0.05	177± 13	59± 3	118± 8
1000ppm	5	5.7± 0.1	3.6± 0.1	1.7± 0.1	0.23± 0.03	168± 7	58± 7	116± 17
2000ppm	5	5.7± 0.2	3.5± 0.1	1.7± 0.1	0.25± 0.09	174± 6	56± 3	112± 9
4000ppm	5	5.6± 0.2	3.5± 0.1	1.6± 0.1	0.27± 0.03	176± 11	56± 3	109± 7
8000ppm	5	5.6± 0.1	3.5± 0.1	1.7± 0.1	0.34± 0.06	169± 10	55± 4	116± 6
16000ppm	0	-	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 003-1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (2)

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		CREATININE mg/dℓ	
Control	5	63±	2	20±	1	226±	40	0±	0	141±	22	15.6±	3.0	0.3±	0.1
1000ppm	5	61±	3	20±	1	225±	50	0±	0	139±	18	15.6±	1.1	0.3±	0.0
2000ppm	5	63±	3	20±	2	226±	42	0±	1	141±	20	16.2±	3.1	0.3±	0.1
4000ppm	5	62±	1	20±	2	254±	52	0±	1	162±	22	14.7±	2.7	0.4±	0.1
8000ppm	5	67±	4	21±	1	245±	49	0±	0	149±	17	13.9±	3.2	0.3±	0.0
16000ppm	0	-		-		-		-		-		-		-	

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 003-1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	SODIUM mEq／ℓ	POTASSIUM mEq／ℓ	CHLORIDE mEq／ℓ	CALCIUM mg／dℓ	INORGANIC PHOSPHORUS mg／dℓ
Control	5	141± 2	4.2± 0.2	106± 1	10.6± 0.2	7.5± 0.5
1000ppm	5	141± 2	4.1± 0.4	105± 2	10.9± 0.5	8.5± 0.8
2000ppm	5	142± 1	4.1± 0.3	105± 1	10.7± 0.4	7.8± 0.8
4000ppm	5	140± 2	4.3± 0.3	105± 2	10.7± 0.1	7.8± 0.8
8000ppm	5	141± 2	4.0± 0.2	106± 1	10.8± 1.3	7.5± 1.1
16000ppm	0	-	-	-	-	-

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

APPENDIX D 2

BIOCHEMISTRY : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 003-1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (2)

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	5.7± 0.3	3.5± 0.1	1.6± 0.1	0.37± 0.12	177± 9	73± 2	136± 7
1000ppm	5	5.5± 0.2	3.5± 0.1	1.7± 0.1	0.39± 0.12	166± 12	68± 5	128± 14
2000ppm	5	5.6± 0.1	3.5± 0.1	1.7± 0.1	0.32± 0.12	168± 14	67± 5	122± 12
4000ppm	5	5.6± 0.2	3.5± 0.1	1.7± 0.1	0.34± 0.07	173± 15	72± 6	134± 10
8000ppm	5	5.6± 0.1	3.5± 0.1	1.7± 0.1	0.41± 0.11	160± 12	68± 5	135± 10
16000ppm	0	-	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 003-1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (2)

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		CREATININE mg/dℓ	
Control	5	63±	2	19±	1	369±	59	1±	1	166±	20	17.4±	2.6	0.3±	0.1
1000ppm	5	63±	3	19±	2	319±	83	0±	1	154±	23	17.4±	3.5	0.3±	0.0
2000ppm	5	59±	3	19±	2	232±	21**	1±	0	135±	7	15.5±	2.0	0.3±	0.1
4000ppm	5	58±	2*	18±	1	277±	50	1±	1	144±	13	16.9±	2.9	0.4±	0.1
8000ppm	5	64±	5	21±	2	277±	81	1±	1	139±	25	13.7±	3.1	0.4±	0.1
16000ppm	0	-		-		-		-		-		-		-	

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

STUDY NO. : 0229
ANIMAL : RAT F344
SAMPLING DATE : 003-1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
SURVIVAL ANIMALS (2)

Group Name	NO. of Animals	SODIUM mEq/ℓ		POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	5	142±	1	3.8±	0.2	108±	2	10.4±	0.4	6.8±	0.8
1000ppm	5	141±	1	4.0±	0.3	108±	3	10.4±	0.4	6.9±	1.0
2000ppm	5	142±	2	3.7±	0.4	108±	1	10.4±	0.2	6.7±	0.6
4000ppm	5	141±	1	4.1±	0.3	106±	1	10.7±	0.7	7.4±	0.5
8000ppm	5	141±	1	4.0±	0.4	107±	3	10.6±	1.0	6.9±	1.0
16000ppm	0	-		-		-		-		-	

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

APPENDIX E 1

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

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	1000ppm 0 (%)	2000ppm 0 (%)	4000ppm 0 (%)
lung	red zone		- (-)	- (-)	- (-)	- (-)
	voluminus		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name	8000ppm	16000ppm
		NO. of Animals	0 (%)	10 (%)
lung	red zone		- (-)	7 (70)
	voluminus		- (-)	5 (50)

APPENDIX E 2

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

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	1000ppm 0 (%)	2000ppm 0 (%)	4000ppm 0 (%)
trachea	fluid:foamy		- (-)	- (-)	- (-)	- (-)
lung	red zone		- (-)	- (-)	- (-)	- (-)
	voluminus		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name NO. of Animals	8000ppm 0 (%)	16000ppm 10 (%)
trachea	fluid:foamy		- (-)	3 (30)
lung	red zone		- (-)	9 (90)
	voluminus		- (-)	2 (20)

APPENDIX E 3

GROSS FINDINGS : SUMMARY, RAT : FEMALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	1000ppm 10 (%)	2000ppm 10 (%)	4000ppm 10 (%)
thymus	red zone		1 (10)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (2W)

Organ	Findings	Group Name	8000ppm	16000ppm
		NO. of Animals	10 (%)	0 (%)
thymus	red zone		0 (0)	- (-)

APPENDIX F 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	157± 9	0.303± 0.028	0.040± 0.006	1.998± 0.217	0.592± 0.063	0.712± 0.074
1000ppm	5	173± 13	0.331± 0.010	0.045± 0.009	2.146± 0.161	0.631± 0.056	0.768± 0.069
2000ppm	5	160± 19	0.306± 0.041	0.044± 0.009	2.011± 0.468	0.601± 0.069	0.722± 0.095
4000ppm	5	161± 18	0.331± 0.029	0.041± 0.005	1.784± 0.236	0.600± 0.061	0.744± 0.058
8000ppm	5	139± 12	0.215± 0.022**	0.049± 0.004	1.757± 0.390	0.514± 0.038	0.649± 0.053
16000ppm	0	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	1.234± 0.070	0.354± 0.050	5.876± 0.403	1.684± 0.107
1000ppm	5	1.375± 0.100	0.382± 0.037	6.851± 0.889	1.711± 0.032
2000ppm	5	1.279± 0.130	0.364± 0.070	6.257± 0.977	1.697± 0.069
4000ppm	5	1.263± 0.179	0.371± 0.041	6.581± 1.057	1.628± 0.044
8000ppm	5	1.197± 0.152	0.291± 0.029	5.273± 0.601	1.650± 0.055
16000ppm	0	-	-	-	-

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

APPENDIX F 2

ORGAN WEIGHT, ABSOLUTE : SUMMARY, RAT : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	123± 6	0.261± 0.012	0.051± 0.010	0.068± 0.004	0.477± 0.054	0.603± 0.054
1000ppm	5	124± 6	0.278± 0.014	0.047± 0.009	0.066± 0.007	0.488± 0.044	0.633± 0.068
2000ppm	5	125± 5	0.279± 0.030	0.050± 0.005	0.065± 0.016	0.504± 0.030	0.625± 0.064
4000ppm	5	126± 4	0.288± 0.019	0.056± 0.012	0.077± 0.016	0.519± 0.050	0.670± 0.054
8000ppm	5	108± 5**	0.165± 0.020**	0.051± 0.001	0.057± 0.012	0.440± 0.027	0.578± 0.025
16000ppm	0	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.995± 0.058	0.285± 0.024	4.305± 0.481	1.629± 0.039
1000ppm	5	1.041± 0.066	0.274± 0.031	4.445± 0.421	1.593± 0.069
2000ppm	5	1.021± 0.029	0.296± 0.022	4.604± 0.283	1.634± 0.046
4000ppm	5	1.097± 0.064	0.311± 0.031	5.007± 0.308*	1.617± 0.055
8000ppm	5	1.016± 0.046	0.236± 0.012*	4.032± 0.264	1.564± 0.040
16000ppm	0	-	-	-	-

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

APPENDIX G 1

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	157± 9	0.194± 0.019	0.026± 0.003	1.273± 0.092	0.377± 0.027	0.453± 0.024
1000ppm	5	173± 13	0.192± 0.012	0.026± 0.004	1.242± 0.063	0.365± 0.016	0.444± 0.033
2000ppm	5	160± 19	0.193± 0.020	0.028± 0.005	1.245± 0.169	0.377± 0.004	0.453± 0.033
4000ppm	5	161± 18	0.207± 0.018	0.026± 0.004	1.109± 0.071	0.374± 0.019	0.466± 0.046
8000ppm	5	139± 12	0.156± 0.012**	0.036± 0.004**	1.256± 0.201	0.371± 0.016	0.468± 0.021
16000ppm	0	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.787± 0.018	0.225± 0.020	3.747± 0.132	1.076± 0.084
1000ppm	5	0.795± 0.028	0.220± 0.010	3.948± 0.251	0.993± 0.068
2000ppm	5	0.803± 0.029	0.227± 0.023	3.905± 0.174	1.074± 0.111
4000ppm	5	0.784± 0.034	0.231± 0.006	4.077± 0.200	1.024± 0.128
8000ppm	5	0.860± 0.035**	0.210± 0.010	3.792± 0.112	1.196± 0.100
16000ppm	0	-	-	-	-

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

APPENDIX G 2

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : MALE

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	123± 6	0.213± 0.017	0.041± 0.007	0.055± 0.003	0.387± 0.027	0.490± 0.041
1000ppm	5	124± 6	0.225± 0.012	0.038± 0.006	0.053± 0.005	0.394± 0.032	0.511± 0.041
2000ppm	5	125± 5	0.222± 0.018	0.040± 0.005	0.051± 0.012	0.403± 0.037	0.498± 0.039
4000ppm	5	126± 4	0.228± 0.012	0.044± 0.009	0.061± 0.012	0.411± 0.033	0.529± 0.032
8000ppm	5	108± 5**	0.153± 0.020**	0.048± 0.003	0.053± 0.011	0.408± 0.022	0.537± 0.036
16000ppm	0	-	-	-	-	-	-

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

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.809± 0.027	0.231± 0.010	3.492± 0.234	1.327± 0.074
1000ppm	5	0.841± 0.034	0.220± 0.016	3.586± 0.217	1.290± 0.104
2000ppm	5	0.816± 0.040	0.236± 0.011	3.680± 0.221	1.306± 0.020
4000ppm	5	0.868± 0.047	0.246± 0.020	3.959± 0.165**	1.280± 0.056
8000ppm	5	0.943± 0.043**	0.220± 0.013	3.739± 0.140	1.453± 0.079*
16000ppm	0	-	-	-	-

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

APPENDIX H 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

RAT : MALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 0 1 (%)	Control 0 2 (%)	Control 0 3 (%)	Control 0 4 (%)	1000ppm 0 1 (%)	1000ppm 0 2 (%)	1000ppm 0 3 (%)	1000ppm 0 4 (%)	2000ppm 0 1 (%)	2000ppm 0 2 (%)	2000ppm 0 3 (%)	2000ppm 0 4 (%)	4000ppm 0 1 (%)	4000ppm 0 2 (%)	4000ppm 0 3 (%)	4000ppm 0 4 (%)
[Respiratory system]																		
nasal cavit			< 0>				< 0>				< 0>				< 0>			
	congestion		- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
lung			< 0>				< 0>				< 0>				< 0>			
	congestion		- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
	edema		- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
[Hematopoietic system]																		
thymus			< 0>				< 0>				< 0>				< 0>			
	hemorrhage		- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
[Endocrine system]																		
adrenal			< 0>				< 0>				< 0>				< 0>			
	congestion		- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)

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	8000ppm				16000ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]										
nasal cavit			< 0>				< 2>			
	congestion		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
lung			< 0>				< 2>			
	congestion		-	-	-	-	1	1	0	0
			(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
	edema		-	-	-	-	1	1	0	0
			(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
[Hematopoietic system]										
thymus			< 0>				< 2>			
	hemorrhage		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
[Endocrine system]										
adrenal			< 0>				< 2>			
	congestion		-	-	-	-	2	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 H 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

RAT : MALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 0 1 (%)	Control 0 2 (%)	Control 0 3 (%)	Control 0 4 (%)	1000ppm 0 1 (%)	1000ppm 0 2 (%)	1000ppm 0 3 (%)	1000ppm 0 4 (%)	2000ppm 0 1 (%)	2000ppm 0 2 (%)	2000ppm 0 3 (%)	2000ppm 0 4 (%)	4000ppm 0 1 (%)	4000ppm 0 2 (%)	4000ppm 0 3 (%)	4000ppm 0 4 (%)
[Respiratory system]																		
lung		< a >	< 0>				< 0>				< 0>				< 0>			
	congestion	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	hemorrhage	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	edema	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	inflammatory infiltration	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	osseous metaplasia	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Hematopoietic system]																		
thymus		< a >	< 0>				< 0>				< 0>				< 0>			
	hemorrhage	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
[Endocrine system]																		
adrenal		< a >	< 0>				< 0>				< 0>				< 0>			
	congestion	b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		(c)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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	8000ppm				16000ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]										
lung			< 0>				< 2>			
	congestion		-	-	-	-	1	1	0	0
			(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
	hemorrhage		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
	edema		-	-	-	-	1	1	0	0
			(-)	(-)	(-)	(-)	(50)	(50)	(0)	(0)
	inflammatory infiltration		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
	osseous metaplasia		-	-	-	-	1	0	0	0
			(-)	(-)	(-)	(-)	(50)	(0)	(0)	(0)
[Hematopoietic system]										
thymus			< 0>				< 2>			
	hemorrhage		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
[Endocrine system]										
adrenal			< 0>				< 2>			
	congestion		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)

Organ	Findings	Group Name	Control				1000ppm				2000ppm				4000ppm			
		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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Reproductive system]																		
ovary			< 0>				< 0>				< 0>				< 0>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name	8000ppm				16000ppm			
		No. of Animals on Study	0				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Reproductive system]										
ovary			< 0>				< 2>			
	congestion		-	-	-	-	2	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 H 3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

RAT : FEMALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0229
ANIMAL : RAT F344
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name	Control				1000ppm				2000ppm				4000ppm			
		No. of Animals on Study	2				2				2				2			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Circulatory system]																		
heart																		
	necrosis:focal		< 2>				< 2>				< 2>				< 2>			
			0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(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	8000ppm				16000ppm			
		No. of Animals on Study	2				0			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Circulatory system]										
heart			< 2>				< 0>			
	necrosis:focal		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

APPENDIX I 1

IDENTITY OF DICHLOROMETHANE IN THE 2-WEEK INHALATION STUDY

IDENTITY OF DICHLOROMETHANE IN THE 2-WEEK INHALATION STUDY

Lot No. APR5259

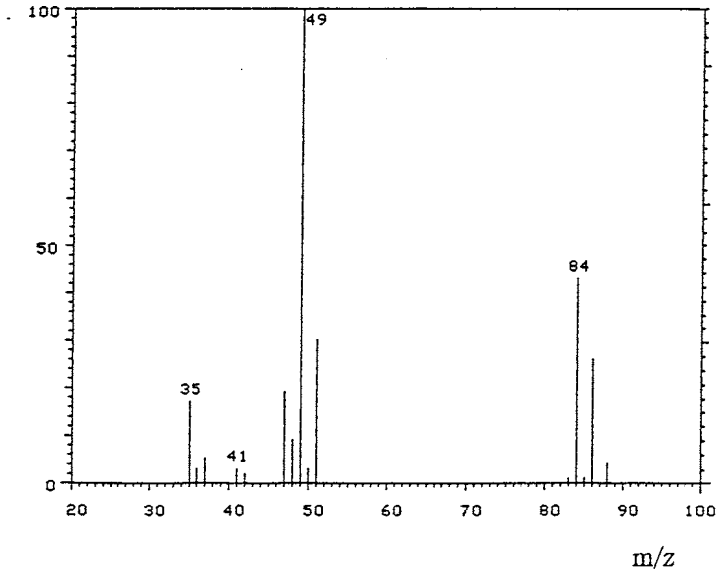
1. Spectral data

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

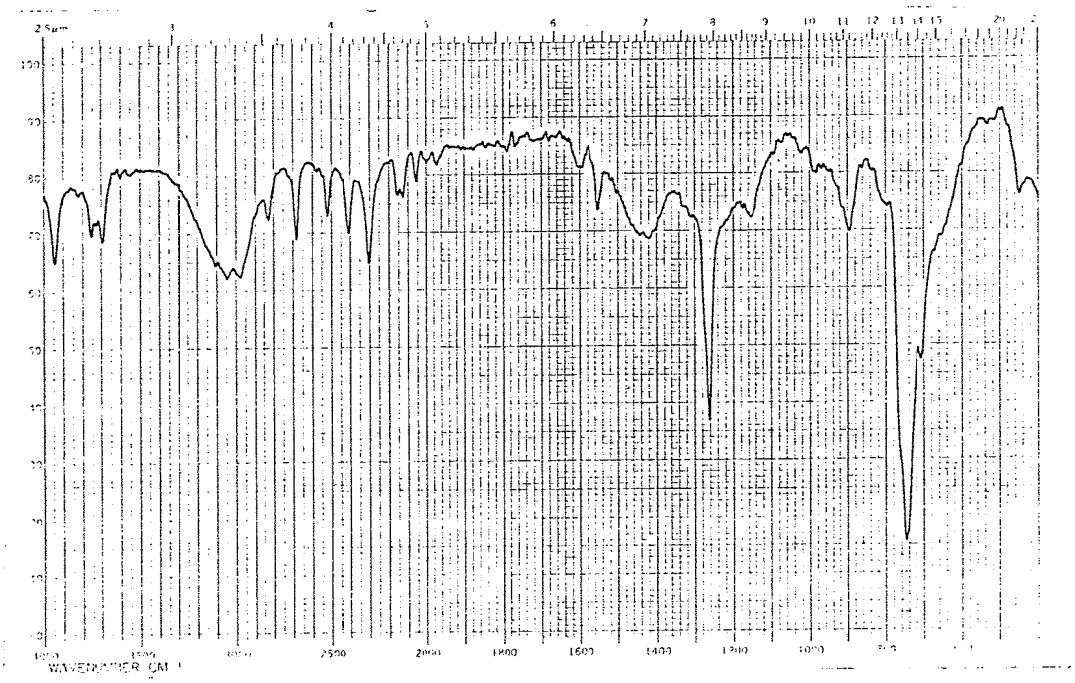
(*EPA/NIH Mass Spectral Data Base (1978) Vol. 1, p. 33.)

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 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 I 2

STABILITY OF DICHLOROMETHANE IN THE 2-WEEK INHALATION STUDY

STABILITY OF DICHLOROMETHANE IN THE 2-WEEK INHALATION STUDY

Lot No. APR5259

1. Sample: This lot was used from 1993.4.13 to 1993.4.26. 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.

1993.04.07(date analyzed)	1993.05.12(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 1993.4.7 and one major peak (peak No.1) and one impurity (peak No.2 < 1% of total area) analyzed at 1993.5.12. No new trace impurity peak in the test substance analyzed at 1993.5.12 was detected.

Date (date analyzed)	Peak No.	Retention Time(min)	Area Count
1993.04.07	1	3.303	65203
	2	3.41	8
1993.05.12	1	3.305	64019
	2	3.407	10

4. Conclusions: The test substance was stable for about 5 weeks in a dark place at room temperature.

APPENDIX J 1

CONCENTRATION OF DICHLOROMETHANE IN THE INHALATION CHAMBER IN THE 2-WEEK INHALATION STUDY

CONCENTRATION OF DICHLOROMETHANE IN THE INHALATION CHAMBER

Group Name	Concentration(ppm) Mean ± S.D.
Control	0.0 ± 0.0
1,000ppm	1,004.1 ± 10.4
2,000ppm	2,003.7 ± 17.3
4,000ppm	3,975.0 ± 35.9
8,000ppm	7,983.4 ± 45.8
16,000ppm	15,973.4 ± 125.4

APPENDIX J 2

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER

IN THE 2-WEEK INHALATION STUDY OF DICHLOROMETHANE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-WEEK INHALATION STUDY OF DICHLOROMETHANE

Group Name	Temperature(℃) Mean ± S.D.	Humidity(%) Mean ± S.D.	Ventilation Rate(L/min) Mean ± S.D.	Room Air Change(time/h) Mean
Control	21.8 ± 0.2	55.4 ± 0.8	211.7 ± 0.6	12.0
1,000ppm	22.0 ± 0.2	57.9 ± 0.6	211.2 ± 0.6	12.0
2,000ppm	22.3 ± 0.2	58.5 ± 0.4	211.0 ± 0.8	11.9
4,000ppm	22.1 ± 0.2	56.6 ± 0.6	212.0 ± 0.6	12.0
8,000ppm	22.5 ± 0.2	57.0 ± 0.7	212.1 ± 0.6	12.0
16,000ppm	21.6 ± 0.2	53.7 ± 0.7	212.2 ± 0.6	12.0

APPENDIX K 1

METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK INHALATION STUDY OF DICHLOROMETHANE

METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-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]
Reticulocyte	Pattern recognition method [3] (New methyleneblue staining)
Prothrombin time	Quick one stage method [2]
Activated partial thromboplastin time (APTT)	Ellagic acid activated method [2]
White blood cell (WBC)	Light scattering method [1]
Differential WBC	Pattern recognition method [3] (May-Grunwald-Giemsa staining)
Biochemistry	
Total protein (TP)	Biuret method [4]
Albumin (Alb)	BCG method [4]
A/G ratio	Calculated as Alb/(TP-Alb) [4]
T-bilirubin	Michaelson method [4]
Glucose	Enzymatic method (HK·G-6-PDH) [4]
T-cholesterol	Enzymatic method (CEH·COD·POD) [4]
Phospholipid	Enzymatic method (PLD·COD·POD) [4]
Glutamic oxaloacetic transaminase (GOT)	UV·Rate method [4]
Glutamic pyruvic transaminase (GPT)	UV·Rate method [4]
Lactate dehydrogenase (LDH)	UV·Rate method [4]
γ -Glutamyl transpeptidase (γ -GTP)	L- γ -Glutamyl-p-nitroanilide method [4]
Creatine phosphokinase (CPK)	UV·Rate method [4]
Urea nitrogen	Enzymatic method (Urease·GLDH) [4]
Creatinine	Jaffe method [4]
Sodium	Flame photometry [5]
Potassium	Flame photometry [5]
Chloride	Coulometric titration [5]
Calcium	OCPC method [4]
Inorganic phosphorus	Enzymatic method (SPL·PGM·G-6-PDH) [4]

1) Automatic blood cell analyzer (Technicon H·1 : Technicon Instruments Corporation,USA)
2) Automatic coagulometer (Amelung KC-10 : Heinrich Amelung GmbH,Germany)
3) Automatic blood cell differential analyzer (Hitachi 8200 : Hitachi,Ltd.,Japan)
4) Automatic analyzer (Hitachi 705 : Hitachi,Ltd.,Japan)
5) Flame photometer (Hitachi 750 : Hitachi,Ltd.,Japan)

APPENDIX K 2

UNISTS AND DECIMAL PLACE FOR HEMAYOLOGY AND BIOCHEMISTRY IN THE 2-WEEK INHALATION STUDY OF DICHLOROMETHANE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-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
Reticulocyte	‰	0
Prothrombin time	sec	1
Activated partial thromboplastin time (APTT)	sec	1
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 transminase (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
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