プロピオノニトリルのマウスを用いた
吸入による2週間毒性試験報告書

試験番号：0447

APPENDICES

APPENDICES

APPENDICES (CONTINUED)

APPENDICES (CONTINUED)

APPENDIX A 1

CLINICAL OBSERVATION : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 2

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-2	1-4	1-7	2-3	2-7
		1	1	1	1	1
PILOERECTION	Control	0	0	0	0	0
	6.3ppm	0	0	0	0	0
	12.5ppm	0	0	1	0	0
	25 ppm	0	0	1	0	0
	50 ppm	0	0	0	0	0
	100 ppm	0	0	0	0	0

APPENDIX B 1

BODY WEIGHT CHANGES : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0447
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	1-2	1-4	1-7	2-3	2-7
Control	23.3± 0.6	23.9± 0.8	23.9± 1.1	24.4± 0.9	24.8± 0.9	25.4± 0.5
6.3ppm	23.3± 0.6	24.1± 0.8	24.6± 0.8	25.3± 0.7	25.2± 1.0	25.9± 1.0
12.5ppm	23.3± 0.6	23.5± 0.8	23.6± 0.6	23.8± 0.7	24.5± 0.4	24.7± 0.6
25 ppm	23.4± 0.6	23.8± 0.5	24.0± 0.4	24.2± 0.5	24.8± 0.7	25.3± 0.6
50 ppm	23.2± 0.8	23.9± 0.9	24.1± 1.0	24.1± 1.1	24.8± 1.5	24.6± 1.4
100 ppm	23.2± 0.8	22.0 ?	23.2 ?	23.9 ?	24.9 ?	25.0 ?

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

BODY WEIGHT CHANGES : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0447
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	1-2	1-4	1-7	2-3	2-7
Control	18.3± 0.9	18.3± 1.0	18.5± 0.8	18.7± 1.4	19.5± 0.6	19.8± 0.5
6.3ppm	18.3± 1.0	18.3± 1.0	18.9± 0.7	19.4± 1.1	19.2± 0.9	20.0± 0.8
12.5ppm	18.3± 0.9	17.9± 1.1	18.6± 1.0	18.7± 1.1	19.4± 0.8	19.9± 0.8
25 ppm	18.3± 1.0	18.6± 1.3	19.4± 1.1	19.6± 1.4	19.9± 0.8	20.7± 1.2
50 ppm	18.3± 0.9	17.8± 1.0	18.7± 0.9	18.8± 0.9	20.1± 0.8	20.2± 0.7
100 ppm	18.3± 0.9	-	-	-	-	-

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. : 0447
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 2
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(6)		2-7(7)	
Control	4.4± 0.3		4.4± 0.2	
6.3ppm	4.6± 0.3		4.5± 0.3	
12.5ppm	4.3± 0.3		4.3± 0.3	
25 ppm	4.5± 0.4		4.6± 0.5	
50 ppm	4.1± 0.3		4.4± 0.3	
100 ppm	3.7	?	4.7	?

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 2

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 2
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(6)	2-7(7)
Control	3.4± 0.2	3.6± 0.1
6.3ppm	3.8± 0.3	3.8± 0.3
12.5ppm	3.4± 0.3	3.8± 0.3
25 ppm	3.6± 0.3	3.8± 0.3
50 ppm	3.5± 0.2	4.0± 0.2
100 ppm	-	-

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

APPENDIX D 1

HEMATOLOGY : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	4	11.15± 0.27	17.0± 0.4	51.4± 0.9	46.1± 0.4	15.3± 0.1	33.1± 0.4	1412± 41
6.3ppm	4	11.24± 0.18	17.3± 0.4	51.5± 0.7	45.8± 0.4	15.4± 0.3	33.6± 0.4	1356± 48
12.5ppm	5	11.02± 0.29	16.8± 0.5	51.0± 1.5	46.3± 0.8	15.3± 0.2	32.9± 0.3	1336± 69
25 ppm	5	10.85± 0.36	16.5± 0.7	50.9± 1.1	46.9± 1.0	15.2± 0.4	32.5± 1.1	1215± 160*
50 ppm	5	10.64± 0.40	16.3± 0.7	49.0± 2.0	46.0± 0.3	15.4± 0.1	33.4± 0.2	1220± 90*
100 ppm	2	10.14	15.5 ?	46.3 ?	45.9 ?	15.3 ?	33.4 ?	1460 ?

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.

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	4	2.28± 1.27	1± 2	12± 2	1± 1	0± 0	1± 1	86± 2	0± 0
6.3ppm	4	2.14± 1.16	2± 1	14± 3	1± 1	0± 0	1± 1	82± 3	0± 0
12.5ppm	5	1.81± 1.65	0± 1	12± 5	1± 1	0± 0	2± 1	85± 7	0± 0
25 ppm	5	1.57± 1.22	1± 1	17± 15	1± 1	0± 0	1± 1	80± 14	0± 0
50 ppm	5	1.40± 0.97	1± 1	19± 7	1± 1	0± 0	1± 2	78± 5	0± 0
100 ppm	2	1.01 ?	1 ?	29 ?	3 ?	0 ?	3 ?	66 ?	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 D 2

HEMATOLOGY : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	4	10.98± 0.40	17.0± 0.6	50.3± 1.8	45.8± 0.4	15.5± 0.1	33.8± 0.4	1188± 65
6.3ppm	5	10.75± 0.40	16.4± 0.5	49.1± 1.4	45.7± 0.7	15.3± 0.3	33.4± 0.7	1081± 87
12.5ppm	5	10.82± 0.39	16.8± 0.4	49.2± 0.8	45.5± 0.9	15.5± 0.2	34.0± 0.3	1209± 22
25 ppm	5	11.01± 0.30	16.9± 0.4	50.2± 1.0	45.6± 0.4	15.3± 0.1	33.6± 0.4	1175± 45
50 ppm	5	10.36± 0.38	16.0± 0.6	47.6± 1.4*	46.0± 0.6	15.5± 0.1	33.8± 0.5	1122± 102
100 ppm	0	-	-	-	-	-	-	-

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

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	4	1.55± 1.28	1± 2	13± 3	1± 1	0± 0	2± 2	84± 3	0± 0
6.3ppm	5	1.18± 0.93	1± 2	12± 4	1± 1	0± 0	4± 2	82± 4	0± 0
12.5ppm	5	1.23± 0.80	1± 1	14± 4	0± 1	0± 0	2± 1	83± 6	0± 0
25 ppm	5	1.86± 1.52	1± 2	16± 6	1± 1	0± 0	2± 1	80± 7	0± 0
50 ppm	5	1.02± 0.83	2± 2	12± 6	1± 2	0± 0	1± 1	84± 7	0± 0
100 ppm	0	-	-	-	-	-	-	-	-

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

APPENDIX E 1

BIOCHEMISTRY : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (3W)

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	4	5.3± 0.1	3.4± 0.2	1.8± 0.2	0.16± 0.02	219± 30	83± 10	20± 8
6.3ppm	5	5.2± 0.1	3.2± 0.1	1.6± 0.1	0.14± 0.01	219± 26	83± 8	14± 5
12.5ppm	5	5.2± 0.2	3.3± 0.1	1.7± 0.1	0.15± 0.02	208± 26	74± 8	10± 3*
25 ppm	5	5.1± 0.2	3.1± 0.2	1.5± 0.1	0.15± 0.01	213± 30	72± 11	13± 5
50 ppm	5	5.0± 0.2	3.1± 0.2	1.7± 0.1	0.16± 0.02	210± 26	73± 7	11± 3*
100 ppm	2	4.6 ?	2.8 ?	1.5 ?	0.17 ?	251 ?	93 ?	14 ?

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.

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dℓ	GOT IU/ℓ	GPT IU/ℓ	LDH IU/ℓ	ALP IU/ℓ	G-GTP IU/ℓ	CPK IU/ℓ
Control	4	179± 24	39± 3	15± 2	212± 29	269± 12	2± 1	79± 11
6.3ppm	5	172± 19	38± 3	16± 3	186± 48	259± 17	1± 1	65± 45
12.5ppm	5	158± 12	41± 7	15± 2	204± 36	267± 34	2± 1	64± 11
25 ppm	5	154± 25	48± 24	21± 13	260± 82	263± 11	2± 1	84± 29
50 ppm	5	152± 14	38± 2	16± 3	208± 78	250± 20	2± 1	63± 15
100 ppm	2	167 ?	35 ?	20 ?	166 ?	207 ?	1 ?	63 ?

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.

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	UREA NITROGEN mg/dℓ	SODIUM mEq/ℓ	POTASSIUM mEq/ℓ	CHLORIDE mEq/ℓ	CALCIUM mg/dℓ	INORGANIC PHOSPHORUS mg/dℓ
Control	4	34.1± 1.1	151± 1	4.6± 0.3	118± 1	9.0± 0.2	7.1± 1.7
6.3ppm	5	29.7± 2.7	151± 1	4.4± 0.4	118± 2	9.2± 0.2	6.7± 1.2
12.5ppm	5	31.3± 3.0	153± 1	4.6± 0.3	118± 1	9.2± 0.2	7.9± 0.8
25 ppm	5	32.1± 4.2	151± 2	4.6± 0.5	117± 1	9.0± 0.1	7.7± 1.1
50 ppm	5	35.2± 3.8	151± 2	4.8± 0.4	118± 2	9.0± 0.4	7.1± 1.6
100 ppm	2	30.9 ?	149 ?	4.9 ?	117 ?	9.4 ?	7.2 ?

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 E 2

BIOCHEMISTRY : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dℓ	ALBUMIN g/dℓ	A/G RATIO	T-BILIRUBIN mg/dℓ	GLUCOSE mg/dℓ	T-CHOLESTEROL mg/dℓ	TRIGLYCERIDE mg/dℓ
Control	5	5.3± 0.1	3.7± 0.2	2.4± 0.4	0.15± 0.01	201± 36	81± 8	17± 2
6.3ppm	5	5.4± 0.1	3.6± 0.2	2.1± 0.5	0.15± 0.01	179± 32	65± 9	12± 4
12.5ppm	5	5.3± 0.2	3.7± 0.2	2.4± 0.5	0.16± 0.02	200± 15	66± 7	11± 3
25 ppm	5	5.4± 0.1	3.8± 0.2	2.4± 0.5	0.18± 0.03	201± 31	75± 18	13± 5
50 ppm	5	5.2± 0.3	3.6± 0.3	2.4± 0.4	0.16± 0.02	238± 25	75± 4	14± 4
100 ppm	0	-	-	-	-	-	-	-

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

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dℓ	GOT IU/ℓ	GPT IU/ℓ	LDH IU/ℓ	ALP IU/ℓ	G-GTP IU/ℓ	CPK IU/ℓ
Control	5	172± 11	46± 2	17± 1	267± 57	383± 30	1± 1	120± 112
6.3ppm	5	145± 25	57± 7	22± 3	303± 67	393± 3	2± 1	149± 130
12.5ppm	5	146± 22	53± 5	20± 4	249± 25	377± 38	3± 1	95± 31
25 ppm	5	160± 42	53± 8	21± 3	247± 41	381± 20	1± 1	70± 11
50 ppm	5	159± 5	49± 6	20± 3	256± 67	357± 35	2± 1	90± 19
100 ppm	0	-	-	-	-	-	-	-

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

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (3W)

Group Name	NO. of Animals	UREA NITROGEN mg/dl	SODIUM mEq/l	POTASSIUM mEq/l	CHLORIDE mEq/l	CALCIUM mg/dl	INORGANIC PHOSPHORUS mg/dl
Control	5	27.3± 5.5	150± 2	4.4± 0.3	117± 3	9.0± 0.3	6.6± 1.3
6.3ppm	5	28.7± 3.1	150± 2	4.4± 0.6	118± 3	9.0± 0.2	7.0± 0.9
12.5ppm	5	28.9± 6.3	150± 1	4.4± 0.3	117± 1	8.9± 0.4	6.7± 0.6
25 ppm	5	29.8± 2.4	150± 2	4.6± 0.2	117± 2	9.2± 0.2	6.9± 0.8
50 ppm	5	27.7± 4.1	148± 2	4.4± 0.5	116± 1	9.0± 0.4	6.4± 1.1
100 ppm	0	-	-	-	-	-	-

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

APPENDIX F 1

GROSS FINDINGS : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (3W)

Organ	Findings	Group Name / NO. of Animals	Control 5 (%)	6.3ppm 5 (%)	12.5ppm 5 (%)	25 ppm 5 (%)
spleen	black zone		0 (0)	0 (0)	0 (0)	0 (0)
stomach	adhesion		0 (0)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (3W)

Organ	Findings	Group Name / NO. of Animals	50 ppm 5 (%)	100 ppm 2 (%)
spleen	black zone		1 (20)	0 (0)
stomach	adhesion		0 (0)	1 (50)

APPENDIX F 2

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

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name / NO. of Animals	Control 0 (%)	6.3ppm 0 (%)	12.5ppm 0 (%)	25 ppm 0 (%)
stomach	gas		- (-)	- (-)	- (-)	- (-)
small intes	gas		- (-)	- (-)	- (-)	- (-)
large intes	gas		- (-)	- (-)	- (-)	- (-)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name	50 ppm	100 ppm
		NO. of Animals	0 (%)	5 (%)
stomach	gas		- (-)	1 (20)
small intes	gas		- (-)	1 (20)
large intes	gas		- (-)	1 (20)

APPENDIX F 3

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (3W)

Organ	Findings	Group Name / NO. of Animals	Control 5	(%)	6.3ppm 5	(%)	12.5ppm 5	(%)	25 ppm 5	(%)
ovary	cyst		0	(0)	0	(0)	0	(0)	1	(20)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (3W)

Organ	Findings	Group Name	50 ppm	100 ppm
		NO. of Animals	5 (%)	0 (%)
ovary	cyst		0 (0)	- (-)

APPENDIX G 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	21.2± 0.6	0.044± 0.004	0.008± 0.003	0.201± 0.010	0.136± 0.012	0.152± 0.007
6.3ppm	5	21.7± 0.9	0.046± 0.003	0.009± 0.001	0.200± 0.011	0.141± 0.007	0.150± 0.009
12.5ppm	5	20.8± 0.7	0.041± 0.007	0.009± 0.001	0.185± 0.018	0.136± 0.010	0.146± 0.007
25 ppm	5	21.1± 0.4	0.039± 0.009	0.009± 0.002	0.170± 0.047	0.142± 0.006	0.146± 0.010
50 ppm	5	21.1± 1.1	0.041± 0.004	0.009± 0.001	0.190± 0.016	0.139± 0.007	0.146± 0.009
100 ppm	2	21.7 ?	0.022 ?	0.010 ?	0.179 ?	0.131 ?	0.140 ?

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.

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.367± 0.012	0.041± 0.003	0.987± 0.037	0.445± 0.011
6.3ppm	5	0.375± 0.014	0.041± 0.004	1.017± 0.051	0.437± 0.018
12.5ppm	5	0.370± 0.014	0.036± 0.002	0.994± 0.057	0.433± 0.016
25 ppm	5	0.375± 0.037	0.039± 0.002	1.024± 0.043	0.441± 0.020
50 ppm	5	0.385± 0.010	0.040± 0.004	0.977± 0.063	0.440± 0.016
100 ppm	2	0.367 ?	0.036 ?	1.148 ?	0.426 ?

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 G 2

ORGAN WEIGHT, ABSOLUTE: SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	16.2± 0.4	0.059± 0.002	0.010± 0.002	0.019± 0.005	0.113± 0.004	0.124± 0.008
6.3ppm	5	16.4± 0.8	0.053± 0.008	0.012± 0.001	0.018± 0.003	0.117± 0.010	0.126± 0.006
12.5ppm	5	16.1± 0.5	0.052± 0.002	0.010± 0.000	0.018± 0.002	0.111± 0.007	0.125± 0.010
25 ppm	5	16.7± 0.9	0.056± 0.008	0.010± 0.002	0.021± 0.003	0.117± 0.006	0.129± 0.012
50 ppm	5	16.5± 0.6	0.051± 0.008	0.011± 0.001	0.018± 0.002	0.107± 0.004	0.129± 0.010
100 ppm	0	-	-	-	-	-	-

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

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	0.236± 0.007	0.041± 0.003	0.739± 0.022	0.430± 0.022
6.3ppm	5	0.243± 0.011	0.041± 0.003	0.747± 0.014	0.421± 0.016
12.5ppm	5	0.227± 0.009	0.038± 0.002	0.764± 0.009	0.412± 0.009
25 ppm	5	0.240± 0.016	0.044± 0.007	0.801± 0.033*	0.435± 0.021
50 ppm	5	0.237± 0.006	0.045± 0.006	0.800± 0.042*	0.427± 0.015
100 ppm	0	-	-	-	-

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

APPENDIX H 1

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	5	21.2± 0.6	0.207± 0.016	0.038± 0.012	0.949± 0.060	0.643± 0.049	0.714± 0.025
6.3ppm	5	21.7± 0.9	0.212± 0.019	0.041± 0.006	0.924± 0.055	0.648± 0.023	0.690± 0.026
12.5ppm	5	20.8± 0.7	0.196± 0.030	0.045± 0.004	0.892± 0.076	0.656± 0.064	0.703± 0.033
25 ppm	5	21.1± 0.4	0.184± 0.041	0.043± 0.011	0.804± 0.222	0.670± 0.021	0.693± 0.036
50 ppm	5	21.1± 1.1	0.193± 0.022	0.041± 0.006	0.903± 0.107	0.658± 0.033	0.693± 0.037
100 ppm	2	21.7 ?	0.099 ?	0.044 ?	0.829 ?	0.603 ?	0.647 ?

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.

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	1.732± 0.062	0.191± 0.014	4.650± 0.143	2.097± 0.076
6.3ppm	5	1.731± 0.061	0.188± 0.015	4.687± 0.065	2.019± 0.125
12.5ppm	5	1.785± 0.082	0.172± 0.009	4.789± 0.238	2.089± 0.076
25 ppm	5	1.777± 0.164	0.185± 0.011	4.848± 0.162	2.087± 0.086
50 ppm	5	1.829± 0.065	0.189± 0.019	4.636± 0.171	2.091± 0.109
100 ppm	2	1.694 ?	0.164 ?	5.302 ?	1.969 ?

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 H 2

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	5	16.2± 0.4	0.365± 0.011	0.064± 0.014	0.118± 0.035	0.699± 0.019	0.765± 0.050
6.3ppm	5	16.4± 0.8	0.323± 0.036	0.071± 0.008	0.107± 0.014	0.711± 0.066	0.765± 0.016
12.5ppm	5	16.1± 0.5	0.323± 0.016	0.061± 0.004	0.111± 0.012	0.690± 0.051	0.777± 0.045
25 ppm	5	16.7± 0.9	0.337± 0.049	0.060± 0.011	0.126± 0.022	0.702± 0.055	0.776± 0.057
50 ppm	5	16.5± 0.6	0.310± 0.039	0.064± 0.006	0.111± 0.013	0.647± 0.013	0.777± 0.034
100 ppm	0	-	-	-	-	-	-

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

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	5	1.463± 0.024	0.252± 0.019	4.577± 0.121	2.663± 0.133
6.3ppm	5	1.481± 0.092	0.250± 0.019	4.552± 0.144	2.562± 0.104
12.5ppm	5	1.414± 0.055	0.239± 0.010	4.753± 0.169	2.564± 0.094
25 ppm	5	1.443± 0.080	0.264± 0.038	4.810± 0.176	2.616± 0.125
50 ppm	5	1.433± 0.043	0.271± 0.029	4.838± 0.173	2.581± 0.064
100 ppm	0	-	-	-	-

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

APPENDIX I 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY,
MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

STUDY NO. : 0447
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name	Control				6.3ppm				12.5ppm				25 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>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
lung			< 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	50 ppm				100 ppm			
		No. of Animals on Study	0				3			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 0>				< 3>			
	congestion		-	-	-	-	3	0	0	0
			(-)	(-)	(-)	(-)	(100)	(0)	(0)	(0)
lung			< 0>				< 3>			
	congestion		-	-	-	-	3	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 I 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY,
MOUSE : MALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name	Control				6.3ppm				12.5ppm				25 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}																		
lung			< 5>				< 5>				< 5>				< 5>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Hematopoietic system}																		
spleen			< 5>				< 5>				< 5>				< 5>			
	deposit of melanin		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
liver			< 5>				< 5>				< 5>				< 5>			
	necrosis:focal		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Endocrine system}																		
thyroid			< 5>				< 5>				< 5>				< 5>			
	ultimibranchial body remanet		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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	50 ppm				100 ppm			
		No. of Animals on Study	5				2			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
lung			< 5>				< 2>			
	hemorrhage		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}										
spleen			< 5>				< 2>			
	deposit of melanin		1	0	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}										
liver			< 5>				< 2>			
	necrosis:focal		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}										
thyroid			< 5>				< 2>			
	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

APPENDIX I 3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY,
MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name	Control				6.3ppm				12.5ppm				25 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>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
lung			< 0>				< 0>				< 0>				< 0>			
	congestion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
	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	50 ppm				100 ppm			
		No. of Animals on Study	0				5			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			< 0>				< 5>			
	congestion		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(40)	(0)	(0)	(0)
lung			< 0>				< 5>			
	congestion		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(40)	(0)	(0)	(0)
	hemorrhage		-	-	-	-	2	0	0	0
			(-)	(-)	(-)	(-)	(40)	(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 4

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY,
MOUSE : FEMALE : SACRIFICED ANIMALS

(2-WEEK STUDY)

Organ	Findings	Group Name	Control				6.3ppm				12.5ppm				25 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}																		
lung			< 5>				< 5>				< 5>				< 5>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Reproductive system}																		
ovary			< 5>				< 5>				< 5>				< 5>			
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)

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

Organ	Findings	Group Name	50 ppm				100 ppm			
		No. of Animals on Study	5				0			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
lung			< 5>				< 0>			
	hemorrhage		0	0	0	0	-	-	-	-
			(0)	(0)	(0)	(0)	(-)	(-)	(-)	(-)
{Reproductive system}										
ovary			< 5>				< 0>			
	cyst		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 J 1

IDENTITY OF PROPIONONITRILE IN THE 2-WEEK INHALATION STUDY

IDENTITY OF PROPIONONITRILE IN THE 2-WEEK INHALATION STUDY

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

Lot No. : WAR4790

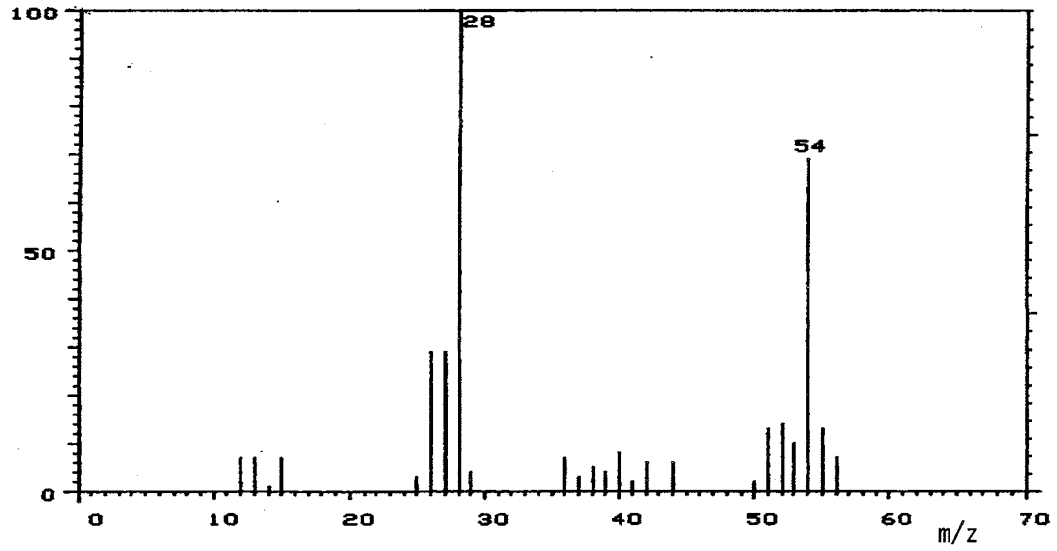
1. Spectral Data

Mass Spectrometry

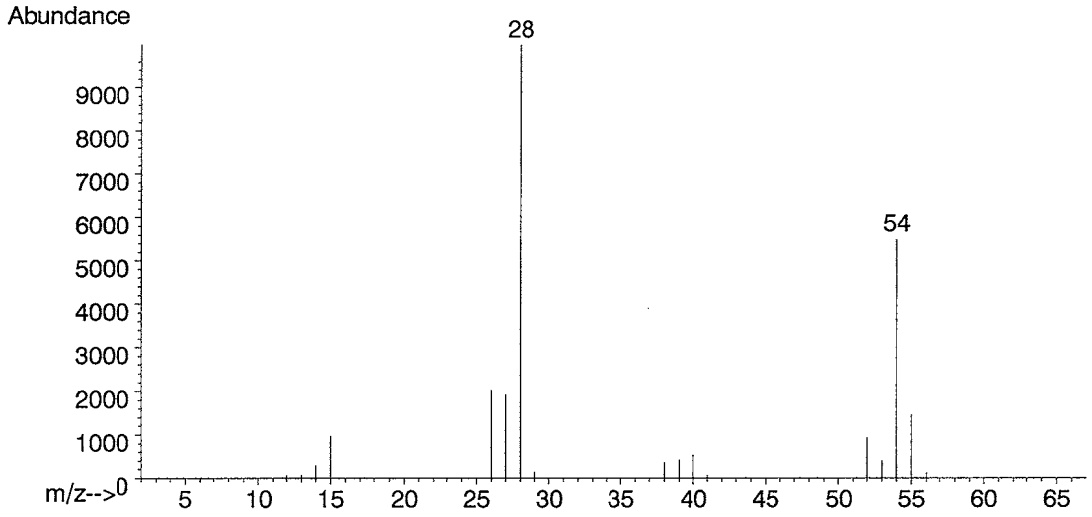
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

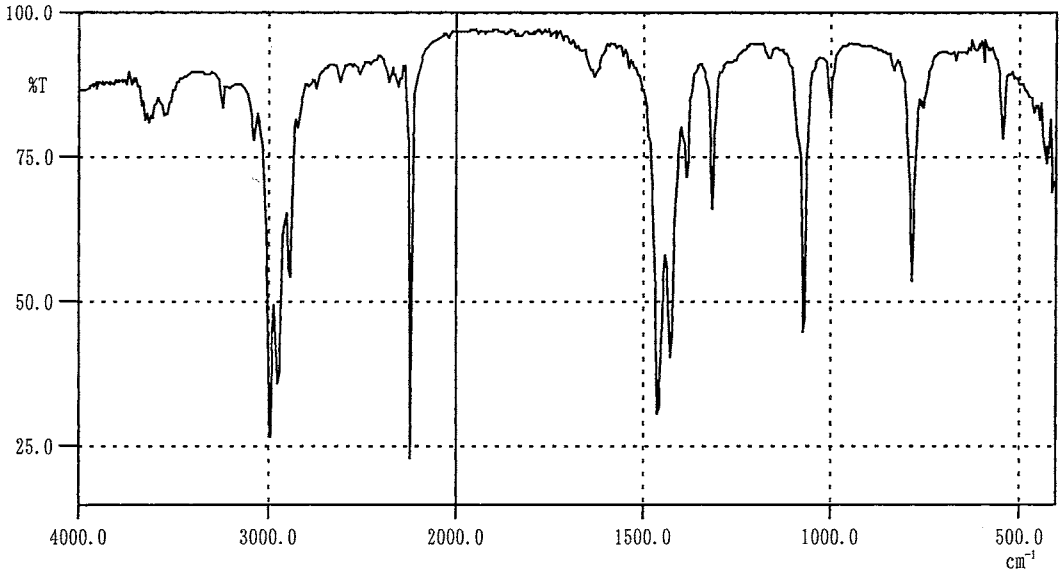
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW. 1994. Wiley Registry of Mass Spectral Data, 6th ed. New York:John Wiley and Sons.)

Infrared Spectrometry

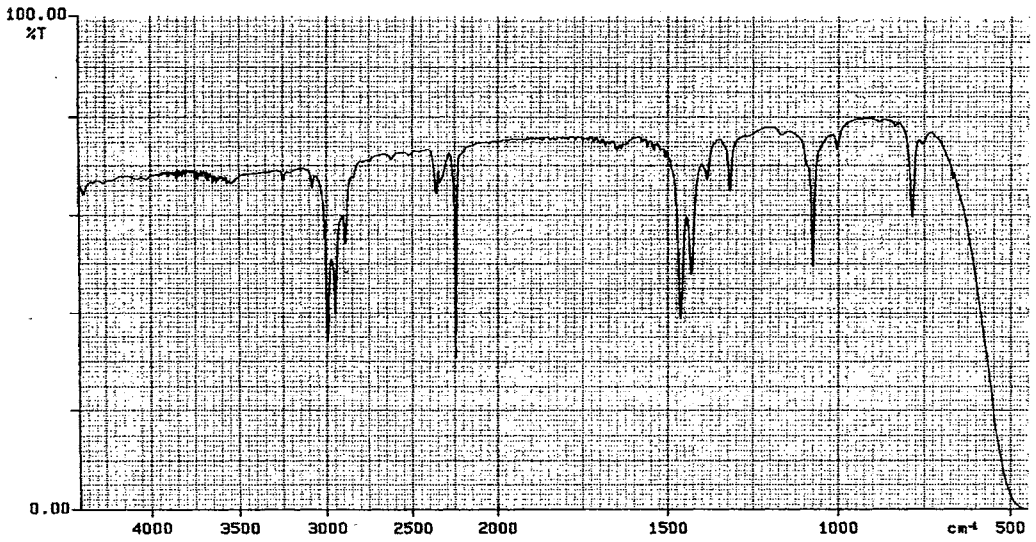
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

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

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

APPENDIX J 2

STABILITY OF PROPIONONITRILE IN THE 2-WEEK INHALATION STUDY

STABILITY OF PROPIONONITRILE IN THE 2-WEEK INHALATION STUDY

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

Lot No. : WAR4790

1. Sample : This lot was used from 2002.4.3 to 2002.4.16. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mmϕ × 60 m)

Column Temperature: 80° C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2002.03.29	1	3.597	100
2002.04.19	1	3.576	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2002.3.29 and one major peak (peak No.1) analyzed on 2002.4.19. No new trace impurity peak in the test substance analyzed on 2002.4.19 was detected.

3. Conclusion: The test substance was stable for about 3 weeks in a dark place at room temperature.

APPENDIX K 1

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

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

Group Name	Concentration(ppm) Mean ± S.D.
Control	0.0 ± 0.0
6.3ppm	6.3 ± 0.1
12.5ppm	12.6 ± 0.1
25ppm	24.9 ± 0.2
50ppm	50.0 ± 0.2
100ppm	100.0 ± 0.7

APPENDIX K 2

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

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

Group Name	Temperature(℃) Mean ± S.D.	Humidity(%) Mean ± S.D.	Ventilation Rate(L/min) Mean ± S.D.	Air Change(time/h) Mean
Control	21.7 ± 0.2	56.9 ± 0.4	104.6 ± 0.3	12.1
6.3ppm	21.7 ± 0.1	59.2 ± 0.5	104.5 ± 0.3	12.1
12.5ppm	21.5 ± 0.1	57.9 ± 0.2	104.6 ± 0.4	12.1
25ppm	21.8 ± 0.1	56.6 ± 0.2	104.4 ± 0.3	12.0
50ppm	21.8 ± 0.1	56.3 ± 0.3	104.4 ± 0.3	12.0
100ppm	21.6 ± 0.1	55.9 ± 0.5	104.3 ± 0.3	12.0

APPENDIX L 1

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

METHOD FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK INHALATION STUDY OF PROPIONONITRILE

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]
Triglyceride	LPL·GK·GPO·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]
Alkaline phosphatase (ALP)	GSCC 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 L 2

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK
INHALATION STUDY OF PROPIONONITRILE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-WEEK INHALATION STUDY OF PROPIONONITRILE

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 transaminase (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
Sodium	mEq/L	0
Potassium	mEq/L	1
Chloride	mEq/L	0
Calcium	mg/dL	1
Inorganic phosphorus	mg/dL	1