1, 2 - ジクロロプロパンのラットを用いた 吸入による 13 週間毒性試験報告書

試験番号:0435

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APPENDIX A 1

 ${\tt CLINICAL\ OBSERVATION: SUMMARY, RAT: FEMALE}$

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 13

SEX : FEMALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE: 1

Clinical sign	Group Name	Admini	stration We	ek-day	10.00	,								
		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
								_	_					
EATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0
	125ppm	0	0	0	0	0	0	0	Ü	0	0	Ü	0	Ü
	250ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000ppm	0	0	0	0	0	0	0	0	0	0	0	1	1
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0
	125ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	250ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	500ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000ppm	0	0	0	0	0	0	0	1	1	1	1	1	1
	2000ppm	0	0	0	0	0	0	0	0	0	0	0	0	0

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APPENDIX B 1

BODY WEIGHT CHANGES : SUMMARY, RAT : MALE

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 13

SEX : MALE

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

b (bon

	0-0		1-7		2-7									
					2-1		3-7		4-7	·	5-7	·····	6-7	
Control	122±	4	149±	6	181±	10	203±	10	222±	12	238±	11	251±	14
125ppm	123±	4	141±	5*	167±	6**	188±	7 * *	206±	7**	221土	9*	234±	7*
250ppm	123±	4	143±	6	170±	9*	192±	10*	213±	11	228生	12	240±	12
500ppm	123±	4	139±	7**	165±	8**	186±	9**	203±	10**	219±	11**	231±	11**
1000ppm	123±	4	138±	5**	164±	7**	182±	8 **	197±	11**	209±	13**	218±	16**
2000ppm	123±	4	128±	7**	138±	5**	151±	13**	166生	12**	177±	13**	190±	17**

(HAN260)

BAIS 4

ANIMAL : RAT F344/DuCrj

UNIT : g
REPORT TYPE : A1 13

BODY WEIGHT CHANGES (SUMMARY)

ALL ANIMALS

SEX : MALE

(HAN260)

Name	Administ	ration v	veek-day											
	7-7		8-7	<i>,</i> , .	9-7		10-7		11-7		12-7		13-7	
Control	262± 1	5	271±	18	280±	17	289±	17	296±	16	304±	18	307±	16
125ppm	244±	9*	255±	11	264±	11	272±	9	277±	10∗	282±	10*	286±	10*
250ppm	252± 1	4	263±	14	271±	14	277±	13	283±	14	289±	14	292±	14
500ppm	242± 1	0*	253±	10*	261±	10*	268±	11*	274±	12*	279±	12**	281±	12**
1000ppm	227 ± 1	7**	233±	18**	242±	20**	248±	19≭*	252±	20**	256±	20**	257±	19**
2000ppm	187± 1	5**	202±	17**	206±	17**	210±	19**	212±	18**	218±	20**	223±	21**
Significant differenc	ce; *:P≦0.0	5 *	*: P ≤ 0.0	01			Test of D	unnett						

BAIS 4

APPENDIX B 2

BODY WEIGHT CHANGES : SUMMARY, RAT : FEMALE

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 13

BODY WEIGHT CHANGES

(SUMMARY)

ALL ANIMALS

Name	Administratio	n week-day				<u> </u>						
	0-0	1-7	2-7		3-7		4-7		5-7		6-7	· · · -
Control	95± 3	108± 4	120±	5	129±	6	137±	8	143±	7	148±	7
125ppm	95± 3	103± 3*	115±	3	124±	4	131±	4	138±	5	143土	5
250ppm	95± 3	102± 5**	113±	5	124±	5	132±	5	140±	4	145±	5
500ppm	95± 3	101± 3 **	113±	3	123±	4*	130±	4	138生	4	142±	5
1000ppm	95± 2	102± 3**	113±	3*	124±	3	129±	3	134±	3**	139±	4*
2000ppm	95± 2	98± 4 **	103±	8**	111±	6 **	115±	12**	124±	8**	128±	11**

Test of Dunnett

(HAN260)

Significant difference; $*: P \leq 0.05$

** : P ≤ 0.01

BAIS 4

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 13

SEX : FEMALE

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

coup Name	Administ	tration	week-day											
	7-7		8-7		9-7		10-7		11-7		12-7		13-7	
Control	152±	7	156±	7	161±	7	164±	8	167±	9	170±	9	173±	9
125ppm	147±	5	152±	5	157±	6	162±	6	165±	8	166±	7	167±	7
250ррш	149±	6	152±	7	157±	8	160±	8	163±	8	166±	9	166±	9
500ppm	146±	5	151±	4	154±	5	157±	4	161±	5	163±	4	164生	4
1000ppm	142±	3**	145±	5 * *	149±	4**	152±	4*	155±	4*	156±	4**	157±	3**
2000ppm	130±	13**	134±	10**	136±	11**	138±	11**	139±	11**	140±	12**	142±	12**

Significant difference; $*: P \leq 0.05$

** : P ≤ 0.01

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX C 1

FOOD CONSUMPTION CHANGES: SUMMARY, RAT: MALE

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 13

SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

PAGE: 1

Group Name	Administration 1-7(6)	week-day(effective) 2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7 (7)
Control	14.0± 0.9	15.0± 1.1	16.1± 0.8	16.0± 0.7	15.8± 0.9	15.5± 1.3	15.5± 1.4
125ppm	11.9± 0.5**	13.4± 0.8**	14.9± 0.9	15.6± 0.7	15.3± 0.8	15.2± 0.8	14.9± 0.9
250ppm	12.0± 0.5**	13.8± 0.8*	14.7± 0.9*	15.7± 0.9	15.5± 1.3	15.7± 1.0	15.2± 1.1
500ppm	11.6± 0.9**	14.2± 1.0	14.9± 0.9	15.5± 0.8	15.5± 1.0	15.5± 1.0	15.4± 0.8
1000ppm	11.0± 0.5**	14.3± 0.8	15.0± 1.3	16.6± 1.9	15.6± 0.9	16.2± 1.5	15.6± 0.8
2000ppm	8.8± 1.1**	9.7± 1.1**	12.2± 2.9**	13.9± 2.3	13.0± 2.1**	15.3± 2.4	11.6± 2.4*

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

Test of Dunnett

(HAN260)

BAIS 4

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

ANIMAL : RAT F344/DuCrj ALL A

UNIT : g

STUDY NO. : 0435

REPORT TYPE : A1 13

SEX : MALE

PAGE: 2

p Name	Administration 8-7(7)	week-day(effective)_ 9-7(7)	10-7(7)	11-7(7)	12-7 (7)	13-7(7)
Control	16.2± 1.4	15.7± 1.0	15.7± 0.9	15.9± 0.8	16.0± 1.0	15.8± 0.8
125ppm	15.6± 0.9	15.5± 1.0	15.5± 0.7	15.5± 0.8	14.9± 1.0	14.7± 1.0
250ppm	15.7± 1.1	16.0± 1.1	15.3± 0.8	15.3± 1.0	15.3± 1.0	14.7± 1.0
500ppm	16.2± 1.1	16.0± 0.8	15.7± 1.0	15.2± 1.0	15.3± 1.1	14.6± 0.9
1000ppm	16.5± 1.5	16.2± 1.0	15.4± 0.9	15.4± 0.8	15.5± 0.8	14.4± 0.6*
2000ppm	14.9± 2.2	13.5± 1.9**	13.8± 2.4	13.3± 1.6★★	14.7± 2.0	14.1± 2.1*

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

(HAN260) BAIS 4

APPENDIX C 2

FOOD CONSUMPTION CHANGES: SUMMARY, RAT: FEMALE

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 13

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

PAGE: 3

oup Name		week-day(effective)					
	1-7 (6)	2-7 (7)	3-7(7)	4-7 (7)	5-7 (7)	6-7(7)	7-7 (7)
Control	10.1± 0.4	10.4± 0.4	10.7± 0.4	10.7± 0.7	10.7± 0.5	10.4± 0.7	9.8± 0.6
125ppm	9.0± 0.3**	9.9± 0.5	10.1± 0.7	10.3± 0.7	10.3± 0.8	10.2± 0.6	10.1± 0.5
250ррт	8.7± 0.6**	9.7± 0.7	10.3± 0.5	10.3± 0.6	10.4± 0.6	10.4± 0.6	10.0± 0.7
500ppm	8.5± 0.5**	10.2± 0.4	10.1± 0.5	10.7± 0.5	10.6± 0.4	10.2 \pm 0.5	10.2± 0.4
1000ppm	8.7± 0.4**	10.3± 0.6	10.5± 0.6	11.2± 0.6	10.5± 0.5	10.8± 0.6	10.5± 0.7
2000ppm	7.1± 0.7**	7.6± 1.6**	9.1± 1.1**	9.3± 2.4	9.9± 0.6**	9.9± 1.9	9.3± 1.9

Significant difference; $*: P \le 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0435 FOOD CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 13

SEX : FEMALE

PAGE: 4

oup Name	Administratio 8-7(7)	n week-day(effective)_ 9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7 (7)	
Control	10.1± 0.6	10.4± 0.3	10.1± 0.5	10.4± 0.7	10.5± 0.5	10.4± 0.6	
125ppm	10.5± 0.7	10.5± 0.6	10.9± 0.8	10.7± 0.6	10.4± 0.4	10.0± 0.6	
250ppm	10.1± 0.8	10.5± 0.8	10.3± 0.5	10.1± 1.2	10.1± 1.0	10.0± 0.7	
500ppm	10.5± 0.4	10.7± 0.7	10.5± 0.7	10.3± 0.7	10.4± 0.5	9.8± 0.6	
1000ppm	10.8 ± 0.4	10.7± 0.7	10.8± 0.4	10.4± 0.3	10.5± 0.5	10.3± 0.6	
2000ppm	10.1 ± 1.7	9.3± 2.0	9.9± 1.7	9.4± 1.7	10.0± 1.6	9.0± 1.7	
				· · · · · · · · · · · · · · · · · · ·			
Significant difference;	*: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			

(HAN260) BAIS 4

APPENDIX D 1

URINALYSIS: SUMMARY, RAT: MALE

URINALYSIS

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1 SEX: MALE

REPORT TYPE : A1

PAGE: 1

oup Name	NO. of	На								Protein	Glucose	Ketone body	Bilirubin
	Animals	5. 0	6.0	6. 5	7. 0	7.5	8. 0	8, 5	CHI	- ± + 2+ 3+ 4+ CHI	- ± + 2+ 3+ 4+ CHI	- ± + 2+ 3+ 4+ CHI	- + 2+ 3+ CHI
Control	10	0	0	0	0	6	3	1		0 6 3 1 0 0	10 0 0 0 0 0	7 2 1 0 0 0	10 0 0 0
125ppm	10	0	0	0	1	3	6	0		0 6 4 0 0 0	10 0 0 0 0 0	10 0 0 0 0 0	10 0 0 0
250ppm	. 10	0	0	0	1	1	8	0	*	0 5 4 1 0 0	10 0 0 0 0 0	7 2 1 0 0 0	10 0 0 0
500ppm	10	0	0	0	0	3	6	1		0 5 4 1 0 0	10 0 0 0 0 0	9 0 1 0 0 0	10 0 0 0
1000ppm	10	0	0	0	1	5	4	0		1 4 5 0 0 0	10 0 0 0 0 0	5 4 1 0 0 0	10 0 0 0
2000ppm	10	0	0	0	0	4	6	0		0 6 4 0 0 0	10 0 0 0 0 0	1 6 2 1 0 0 *	10 0 0 0

(HCL101)

BAIS 4

URINALYSIS

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

NO. of Urobilinogen Group Name Occult blood ± + 2+ 3+ 4+ CHI Animals $-\pm+2+3+$ CHI 10 0 0 0 0 Control 10 10 0 0 0 0 125ppm 10 10 0 0 0 0 10 0 0 0 0 250ppm 10 10 0 0 0 0 10 0 0 0 0 500ppm 10 10 0 0 0 0 10 0 0 0 0 1000ppm 10 10 0 0 0 0 10 0 0 0 0 2000ppm 10 10 0 0 0 0 10 0 0 0 0 Significant difference ; $*: P \leq 0.05$ ** : $P \leq 0.01$ Test of CHI SQUARE

(HCL101)

BAIS 4

APPENDIX D 2

URINALYSIS: SUMMARY, RAT: FEMALE

STUDY NO. : 0435 URINALYSIS

ANIMAL : RAT F344/DuCrj

1000ppm

2000ppm

MEASURE. TIME: 1

SEX : FEMALE REPORT TYPE : A1

10

Group Name NO. of Protein_ Glucose_ Ketone body Bilirubin $-\pm +2+3+4+$ CHI - + 2 + 3 + CHIAnimals 5.0 6.0 6.5 7.0 7.5 8.0 8.5 CHI $-\pm+2+3+4+$ CHI $-\pm + 2 + 3 + 4 + CHI$ Control 10 1 5 7 2 1 0 0 0 10 0 0 0 0 0 9 1 0 0 0 0 10 0 0 0 0 0 125ppm 7 3 0 0 0 0 10 0 0 0 0 0 10 0 0 0 0 0 10 0 0 0 10 10 0 0 0 250ppm 9 1 0 0 0 0 10 0 0 0 0 0 10 0 0 0 0 0 10 0 500ppm 10 10 0 0 0 0 0 10 0 0 0 0 0 10 0 0 0 0 0 10 0 0 0

10 0 0 0 0 0

9 0 0 0 0 0

7 3 0 0 0 0

3 4 1 1 0 0

PAGE: 3

10 0 0 0

8 1 0 0

Significant difference ; $*: P \le 0.05$ **: $P \le 0.01$ Test of CHI SQUARE

7 3 0 0 0 0

5 4 0 0 0 0

(HCL101) BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Occult blood - ± + 2+ 3+ CHI	Urobilinogen ± + 2+ 3+ 4+ CHI	
Control	10	10 0 0 0 0	10 0 0 0 0	
125ppm	10	10 0 0 0 0	10 0 0 0 0	
250ppm	10	10 0 0 0 0	10 0 0 0 0	
500ppm	10	10 0 0 0 0	10 0 0 0 0	
1000ppm	10	10 0 0 0 0	10 0 0 0 0	
2000ppm	9	9 0 0 0 0	9 0 0 0 0	
Significant	difference	; *: P ≤ 0.05 **	$P \le 0.01$ Test of CHI SQUARE	

(HCL101) BAIS 4

APPENDIX E 1

HEMATOLOGY: SUMMARY, RAT: MALE

ANIMAL : RAT F344/DuCrj

MEASURE, TIME: 1 SEX: MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (14W)

is · mille	ILDI VILI														
oup Name	NO. of Animals	RED BLO	OOD CELL	HEMOGLO g/dl	BIN	HEMATOO %	CRIT	MCV f 2		MCH pg		MCHC g/dl		PLATELE 1 0³/µ	
Control	10	9.31±	0. 21	15.9±	0.4	45.6±	1. 2	49.0±	0.6	17.1±	0. 3	34.9±	0.7	780±	57
125ppm	10	9.36±	0.19	16.0±	0.4	46.1±	1. 1	49.2±	0.7	17.1±	0.2	34.8±	0.6	804±	39
250ppm	10	9.33±	0.16	15.8±	0.4	46.0±	0.7	49.3±	0.5	17.0±	0. 2	34.4±	0.4	809±	53
500ppm	10	8.95±	0.17**	15.4±	0.3*	45.2±	0.8	50.5±	0.8*	17.2±	0. 2	34.0±	0,5**	816±	67
1000ppm	9	8.00±	0. 22**	14.7±	0.2**	43. 4±	0.8**	54.3±	1. 6**	18.3±	0. 6**	33.8±	0.3**	925±	59**
2000ppm	10	7.58±	0.36**	14.6±	0.5**	43.7±	1. 2**	57.8±	1.8**	19.3±	0.5**	33.3±	0.5**	959±	64**

(HCL070)

BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1 SEX : MALE

HEMATOLOGY (SUMMARY) ALL ANIMALS (14W)

up Name	NO. of Animals	RETICUL %	осуте	PROTHRO s e c	MBIN TIME	APTT sec		
Control	10	1.9±	0. 1	17.0±	2.0	26.3±	2.7	
125ppm	10	1.8±	0.2	17.5±	3. 2	25.8±	3. 4	
250ppm	10	1.9±	0.2	17.3±	3. 3	27.9±	5. 1	
500ppm	10	2.3±	0.2	18.9±	3. 7	27.2±	3. 8	
1000ppm	9	5.5±	0. 6**	16.7土	2. 5	25.4±	4. 1	
2000ppm	10	10.5±	3.0**	17.3±	3. 1	21.0±	3, 8*	

(HCL070)

BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (14W)

ıp Name	NO. of Animals	WBC 1 0 ^a /		Dif N-BAND	ferentia	L WBC (% N-SEG	,)	EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	10	5.17±	1. 19	1±	1	18±	4	1±	1	0±	0 .	4±	2	76±	5	0±	
125ppm	10	5.08±	1. 27	2±	1	20主	3	1±	1	0±	0	3±	1	74±	2	0±	
250ppm	10	5.03±	1. 59	2±	1	23±	6	$2\pm$	1	0±	0	3±	2	70±	7	0±	
500ppm	10	4.62±	1.66	2±	1	24土	6*	1±	1	0±	0	3±	1	70±	6*	0±	
1000ppm	9	3.91±	0. 93	2±	2	22生	3	1±	1	0±	0	2±	2	73±	4	0±	
2000ppm	10	4.82±	2, 12	$2\pm$	1	22±	3	1±	1	0±	0	4±	2	70±	4	0±	

(HCL070)

BAIS 4

APPENDIX E 2

HEMATOLOGY: SUMMARY, RAT: FEMALE

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (14W)

· I Daniel	KDI OKI	1112 - 111													
oup Name	NO. of Animals	RED BLO	OOD CELL	HEMOGLO g/dl		HEMATOC %	RIT	MCV f l		MCH pg		MCHC g∕dl		PLATELE 1 0³/µ	
Control	9	8.60±	0. 21	15.9±	0. 5	44.3±	0.9	51.5±	0.3	18.5±	0. 2	36.0±	0.5	81 7 ±	64
125ppm	10	8.59±	0. 20	15.8±	0.4	44.4±	1.0	51.7±	0.4	18.4±	0. 2	35.6±	0.4	783±	56
250ppm	10	8.44±	0.24	15.7±	0.4	44.2±	1.0	52.4±	0.5	18.6±	0. 1	35.4±	0.4	825±	58
500ppm	10	8.13±	0. 27**	15.4±	0.6	43.7±	1. 2	53, 7±	0.6**	18.9±	0.2	35, 3±	0.5	863±	78
1000ppm	10	7.77±	0.24**	15.1±	0.4**	43.7±	1. 1	56.2±	1.2**	19.4±	0. 2**	34.6±	0.6**	874±	54
2000ppm	9	7.18±	0.39**	14.3±	0.8**	42.5±	1.4**	59.3±	2.5**	19.9±	0.5**	33.6±	1.0**	932±	114**

(HCL070)

BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (14W)

PAGE: 5 SEX : FEMALE Group Name NO. of RETICULOCYTE PROTHROMBIN TIME APTT % Animals s e c s e c Control 9 $1.9 \pm$ 0.2 $15.2 \pm$ 0.7 17.3± 1.8 125ppm 10 1.9± 0.3 15.1 \pm 1.0 17.8± 3.5 250ppm 10 $2.5\pm$ 0.3 15.4土 0.8 17.3± 1.9 500ppm 10 $3.5\pm$ 0.4* 15.5± 1.3 17.3± 2.3 1000ppm 10 $6.4\pm$ 2.7** 16.7± 1.6 16.6± 1.9 2000ppm 9 11.5± 4.5** $18.3 \pm$ 2.9* 18.9 ± 3.9 Significant difference; *: P ≤ 0.05 ** : $P \leq 0.01$ Test of Dunnett

(HCL070)

BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (14W)

oup Name	NO. of Animals	₩BC 1 0³/µ		Dif N-BAND	ferentia	1 WBC (% N-SEG	s)	EOSINO		BASO		MONO		LYM PHO		OTHER	
Control	9	3.12±	1.01	2±	1	20±	6	1±	1	0±	0	2±	. 1	74±	6	0±	
125ppm	10	3.54±	1.35	1±	1	21±	4	1±	1	0±	0	4±	2	73±	4	0±	
250ppm	10	3.13±	1.28	2±	1	23±	6	1±	1	0±	0	3±	2	71±	6	0±	
500ррш	10	4.50±	1.81	2±	1	22±	6	2±	1	0±	0	3±	2	72±	7	0±	
1000ррт	10	3.93±	2. 02	2±	1	19生	5	1±	0	0±	0	3±	, 1	74±	5	0±	
2000ppm	9	4.36±	2. 21	$3\pm$	1	22±	7	1±	1	0±	0	$3\pm$	2	71±	7	0±	

PAGE: 6

(HCL070) BAIS 4

APPENDIX F 1

BIOCHEMISTRY: SUMMARY, RAT: MALE

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1 SEX: MALE REPORT TYPE : A1 BIOCHEMISTRY (SUMMARY) ALL ANIMALS (14W)

PAGE: 1

o Name	NO. of Animals	TOTAL F g/dl	PROTEIN	ALBUMIN g/dl		A/G RAT	10	T-BILI mg/dl		GLUCOSE mg/dl		T-CHOLES mg/dl	TEROL	TRIGLYCI mg/dl	ERIDE
Control	10	6.6±	0. 1	3.9±	. 0.1	1.5±	0. 1	0.13±	0. 02	182±	23	66±	4	53±	14
125ppm	10	6.6±	0. 1	3.9±	0.1	1.4±	0. 1	0.13±	0. 01	174±	18	63±	4	36±	8**
250ppm	10	6.6±	0.1	3.9±	0.1	1.4±	0. 1	0.13±	0.01	182±	13	62±	4	39±	11*
500ppm	10	6.7±	0.1	4.0±	0.1	1.4±	0. 1	0.13±	0. 01	179±	17	64±	4	43±	12
1000ppm	9	6.8±	0.2**	4.1±	0.1**	1.5±	0.1*	0.14±	0. 01	167±	8	53±	6**	26±	9**
2000ppm	10	6.6±	0. 1	4.0生	0.1**	1.5±	0. 1*	0.18±	0.02**	161±	10*	60±	4*	34±	10**

(HCL074)

BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (14W)

p Name	NO. of Animals	PHOSPHOI mg/dl	LIPID	GOT IU/L		GPT IU/l		LDH IU/A	<u>!</u>	ALP IU/A	<u>.</u>	G-GTP IU/L	!	CPK IU/£	
Control	10	122±	8	62±	16	43±	5	183±	63	243±	13	2±	1	105士	12
125ppm	10	116±	7	65±	12	43±	8	191±	41	250±	33	4±	5	116±	23
250ppm	10	116±	8	70±	18	41士	8	193±	58	238±	31	3±	1	110±	19
500ppm	10	119±	8	61±	16	36±	8	180±	37	212±	23	2±	1	103±	15
1000ppm	9	101±	10**	46±	3	20±	5**	159±	43	200±	18**	2±	1	101±	17
2000ppm	10	119生	8	40±	5**	19±	8**	238±	93 .	262±	40	6±	10*	116±	26

Significant difference; $*: P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (14W)

ANIMAL : RAT F344/DuCrj MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

PAGE: 3 Group Nama NO of HREA NITROGEN CREATININE MITGOS POTASSTIM CHLORIDE CALCTIM INORGANIC PHOSPHORUS

oup Name	NO. of Animals	mg/dl	mg/dl	mEq/2	mEq/l	mEq/l	mg/dl	mg/dl
Control	10	18.7± 1.5	0.5± 0.1	141± 1	3.6± 0.2	105± 1	10.1± 0.1	5.6± 0.6
125ppm	10	18.6± 2.2	0.6± 0.1	142± 1	3.8± 0.3	106± 1	10.0± 0.2	5.8± 0.7
250ppm	10	19.5± 1.6	0.5± 0.0	142± 2	3.7± 0.3	106± 1	10.1± 0.2	5.4± 0.9
500ppm	10	18.2± 1.4	0.5± 0.0	142± 1	4.0± 0.3*	106± 2	10.1± 0.2	5.5± 0.7
1000ррт	9	17.7± 2.3	0.5± 0.0	142± 2	4.1± 0.3**	106± 2	10.1± 0.2	5.7± 0.8
2000ppm	10	19.0± 2.1	0.6± 0.2	140± 1	4.8± 0.4**	106± 2	9.9± 0.2	6.2± 1.2

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

Test of Dunnett

(HCL074) BAIS 4

APPENDIX F 2

BIOCHEMISTRY: SUMMARY, RAT: FEMALE

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1 SEX: FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (14W)

ip Name	NO. of Animals	TOTAL F	PROTEIN	ALBUMIN g/dl	Ī	A/G RAT	TIO	T-BILI mg/dl		GLUCOSE mg/dl		T-CHOLE mg/dl	STEROL	TRIGLYCE mg/dl	ERIDE
Control	9	6.3±	0.1	3.6±	0.1	1.3±	0. 1	0.16±	0.02	129±	12	68±	5	13±	4
125ppm	10	6.2±	0.2	3.6±	0.1	1.4±	0. 1	0.16±	0.03	139生	12	65±	6	12±	5
250ppm	10	6.2±	0.2	3.6±	0.1	1.4±	0.0	0.15±	0.03	143±	15*	63±	8	13±	2
500ppm	10	6.3±	0. 1	3.7±	0. 1	1.4±	0. 1	0.16±	0.02	144土	12*	71±	10	16±	3
1000ppm	10	6.3±	0.2	3.8±	0.1**	1.5±	0.1**	0.20±	0.03*	147土	10**	63±	11	20±	7*
2000ppm	9	6.3±	0.2	3.8±	0.2**	1.5±	0.1**	0.25±	0.06**	151±	7 * *	64±	20	25±	8**

(HCL074)

BAIS 4

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (14W)

STUDY NO. : 0435

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

Group Name NO. of PHOSPHOLIPID LDH ALP G-GTP CPK GOT GPT mg/dl IU/2 IU/l I U/l IU/2 Animals IU/2 IU/2 124土 37 Control 9 $132\pm$ 10 67± 10 153 $201\pm$ 18 $3\pm$ 1 $36\pm$ 14 $254 \pm$ 125ppm 10 $126\pm$ 8 $66\pm$ 10 $33\pm$ 9 $264\pm$ 126 $202\pm$ 18 $2\pm$ 1 $119\pm$ 34 $199\pm$ 22 $3\pm$ $123\pm$ 39 250ppm 10 $124\pm$ 10 65± 15 13 268± 118 1 $31\pm$ $139 \pm$ 15 100 182± 3± 1 500ppm 10 53 土 3** $21\pm$ $254\pm$ 19 105± 24 4** 1000ppm 10 128士 18 $52\pm$ $19\pm$ 298± 130 $208\pm$ 28, 5± 2** 114± 31 6** 2** 2000ppm 9 $135\pm$ 32 206土 269 $62\pm$ 77 $542 \pm$ 477 $267 \pm$ 62 $10\pm$ 2** $109\pm$ 31

Significant difference; *: P ≤ 0.05

** : $P \le 0.01$

Test of Dunnett

PAGE: 5

(HCL074) BAIS 4

ANIMAL : RAT F344/DuCrj

MEASURE. TIME : 1 SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (14W)

up Name	NO. of Animals	UREA NI mg/dl	TROGEN	CREATIN mg/dl	IINE	SODIUM m Eq / l		POTASS1 m Eq / .		CHLORIDE m Eq / 12		CALCIUM mg/dl		INORGAN mg/dl	IC PHOSPHORU
Control	9	19.9±	2. 2	0.5±	0.1	140±	2	3.6±	0.3	107±	2	9.7±	0.2	5.1±	1. 1
125ppm	10	20.2±	2. 7	0.5±	0.0	140土	1	3.7±	0.2	107±	1	9.5±	0.3	5.0生	0.7
250ppm	10	18.1±	2.6	0.5±	0.0	140土	2	3.9±	0.2	108±	2	9.6±	0.3	5.2±	1.2
500ppm	10	19.3±	2.6	0.5±	0. 0	140±	1	3.9±	0.3	107±	2	9.6±	0.2	5.1±	1. 2
1000ppm	10	19.3±	2.0	0.6±	0. 1	139±	2	4. 2±	0.5**	106±	3	9.5±	0.3	5.5±	1. 0
2000ppm	9	20.3±	3. 5	0.6±	0.1	138±	2	4.7±	0.2**	105±	2	9.5±	0.2	5.8±	1. 1

(HCL074)

BAIS 4

APPENDIX G 1

 ${\tt GROSS\ FINDINGS: SUMMARY,\ RAT: MALE: SACRIFICED\ ANIMALS}$

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (14W)

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	125ppm 10 (%)	250ppm 10 (%)	500ppm 10 (%)
liver	herniation		0 (0)	1 (10)	0 (0)	1 (10)
(HPT080)				·		BAI

ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (14W)

REPORT TYPE : A1

SEX : MALE

 Organ
 Findings
 6 Froup Name NO. of Animals 10 (%)
 10 (%)

 liver
 herniation
 0 (0)
 1 (10)

(HPT080)

BAIS 3

APPENDIX G 2

 ${\tt GROSS\ FINDINGS: SUMMARY,\ RAT: FEMALE: DEAD\ AND\ MORIBUND\ ANIMALS}$

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0- 14W)

Organ	Findings	Group Name NO. of Animals	Control 0 (%)	125ppm 0 (%)	250ppm 0 (%)	500ppm 0 (%)
lung	red zone		- (-)	~ (-)	- (-)	- (-)
hymus	red zone		- (-)	- (-)	- (-)	- ()
iver	accentuation of lobular structure		- (-)	- (-)	- (-)	- (-)

(HPT080)

BAIS 3

: RAT F344/DuCrj

GROSS FINDINGS (SUMMARY)

ANIMAL REPORT TYPE : A1

SEX

: FEMALE

DEAD AND MORIBUND ANIMALS (0- 14W)

Organ	Findings	Group Name NO. of Animals	1000ppm 0 (%)	2000ppm 1 (%)		
lung	red zone		- (-)	1 (100)		
thymus	red zone		- (-)	1 (100)		
liver	accentuation of lobular structure		- ()	1 (100)		
(HPT080)					- 	BAIS 3

APPENDIX G 3

 ${\tt GROSS\ FINDINGS: SUMMARY,\ RAT: FEMALE: SACRIFICED\ ANIMALS}$

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 : FEMALE SEX

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (14W)

	_ NO. of Animals	10 (%)	10 (%)	10 (%)	10 (%)
		1			
erniation		2 (20)	0 (0)	1 (10)	0 (0)
yst		0 (0)	1 (10)	0 (0)	0 (0)
			. ()	. ()	

(HPT080)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (14W)

0rgan	Findings	Group Name NO. of Animals	10	1000ppm (%)	2000ppm 9 (%)	
liver	herniation		2	(20)	2 (22)	
ovary	cyst		0	(0)	0 (0)	
ovary	cyst		0	(0)	0 (0)	

BAIS 3

APPENDIX H 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, RAT : MALE

ORGAN WEIGHT: ABSOLUTE (SUMMARY) SURVIVAL ANIMALS (14W)

STUDY NO. : 0435

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : MALE
UNIT: g

oup Name	NO. of Animals	Body	Weight	THYMU	JS	ADREI	VALS	TESTI	ES	HEAR	r 	LUNG	5
Control	10	287±	16	0.248±	0.043	0.051±	0.004	2.906±	0. 212	0.878±	0.059	0.989±	0.049
125ppm	10	264±	10**	0.218±	0.029	0.049±	0.004	2. 953±	0.089	0.846±	0.033	0.944±	0. 047
250ppm	10	268主	12*	0.223±	0.016	0.048±	0.005	2.952±	0.128	0.862±	0.040	0.940±	0. 045
500ppm	10	259±	12**	0.209±	0.018	0.047±	0.005	2.979±	0.103	0.834 \pm	0.048	0.898±	0. 046**
1000ppm	10	237±	18**	0.204±	0.032	0.044±	0.004**	3.015±	0.201	0.800±	0.033**	0.874±	0. 067**
2000ppm	10	203±	21**	0.175±	0.034**	0.048±	0,005	2.902±	0.148	0.765±	0.055**	0.836±	0.060**

PAGE: 1

(HCL040) BAIS 4

ORGAN WEIGHT: ABSOLUTE (SUMMARY)

ANIMAL : RAT F344/DuCrj SURVIVAL ANIMALS (14W)

REPORT TYPE : A1

STUDY NO. : 0435

SEX : MALE UNIT: g

oup Name	NO. of Animals	KID	NEYS	SPLI	EEN	LIV	ER	BRA.		
Control	10	1.764±	0. 113	0.526±	0. 035	7. 215±	0. 524	1.872±	0. 037	
125ppm	10	1.663±	0.066	0.485土	0. 027	6.681±	0. 405	1.848±	0. 021	
250ррш	10	1.726±	0.086	0.488±	0.031	6.939±	0.460	1.854±	0. 053	
500ppm	10	1.704±	0.074	0.501±	0.032	6.976±	0.440	1.836±	0. 032	
1000ppm	10	1.727±	0. 115	0.652±	0.054**	6.815±	0. 599	1.795±	0. 038**	
2000ppm	10	1.613±	0.149**	0.731±	0.041**	6.315±	0.651**	1.708±	0.045**	

PAGE: 2

(HCL040) BAIS 4

APPENDIX H 2

ORGAN WEIGHT, ABSOLUTE: SUMMARY, RAT: FEMALE

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE UNIT: g ORGAN WEIGHT: ABSOLUTE (SUMMARY)

SURVIVAL ANIMALS (14W)

p Name	NO. of Animals	Body F	Weight	THYM	JS	ADRE	NALS	OVAR	IES	HEAR'	Γ	LUNG	S	
Control	10	158±	8	0.190±	0. 021	0.051±	0.007	0.090±	0.010	0.569±	0. 037	0.706土	0.035	
125ppm	10	153±	7	0.185±	0.016	0.054±	0.002	0.112±	0.085	0.554±	0. 016	0.713±	0.039	
250ррт	10	152±	7	0.180±	0.012	0.053±	0.004	0.086±	0.012	0.566±	0. 030	0.694±	0.034	
500ppm	10	149±	3	0.173±	0.012	0.054±	0. 005	0.084±	0.011	0.539±	0. 023	0.677±	0. 025	
1000ppm	10	142±	4**	0.169±	0.013*	0.053±	0. 005	0.079±	0.008	0.530±	0. 025*	0.670±	0. 027	
2000ppm	9	129±	11**	0.146±	0.024**	0.055±	0.012	0.066±	0.015**	0.541±	0.049	0.636±	0.049**	

(HCL040)

BAIS 4

STUDY NO. : 0435 ANIMAL : RAT F344/DuCrj ORGAN WEIGHT: ABSOLUTE (SUMMARY) 'SURVIVAL ANIMALS (14W)

REPORT TYPE : A1 SEX : FEMALE UNIT: g

oup Name	NO. of Animals	KID	NEYS	SPL	EEN	LIV	ER	BRA	IN		 7	
				Ÿ	1		1.00					
Control	10	1.062±	0.046	0.355±	0.022	$3.777\pm$	0. 253	1.754±	0. 029			
125ppm	10	1.058±	0.041	0.341±	0.010	3.744±	0. 194	1.721±	0.030			
250ppm	10	1.074±	0.064	0.333±	0.022	3.814±	0. 194	1.720±	0. 043			
500ppm	10	1.078±	0.060	0.380±	0.025	4. 014±	0.119	1.671±	0. 045**			
1000ppm	10	1.112±	0.061	0.451±	0.053**	4. $406\pm$	0.319**	1.680±	0. 032**			
2000ppm	9	1.153±	0.103*	0.509±	0.070**	4.655±	0.678**	1.571±	0. 049**			•
Significant	difference;	*: P ≤ 0.	05 **	: P ≤ 0.01		4	Tes	st of Dunnet	t	·	 	
CL040)							· · · · · · · · · · · · · · · · · · ·		***			BA

APPENDIX I 1

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : MALE

ORGAN WEIGHT: RELATIVE (SUMMARY) SURVIVAL ANIMALS (14W)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

STUDY NO. : 0435

SEX : MALE

UNIT: %

PAGE: 1

ip Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	287± 16	0.086± 0.012	0.018± 0.002	1.015± 0.072	0.307± 0.014	0.345± 0.009
125ppm	10	264± 10**	0.082± 0.009	0.019± 0.001	1.119± 0.051*	0.320± 0.011	0.357± 0.011
250ppm	10	268± 12*	0.083± 0.005	0.018± 0.002	1.102± 0.055	0.321± 0.013	0.351± 0.010
500ppm	10	259± 12**	0.081± 0.006	0.018± 0.002	1.154± 0.061**	0.323± 0.011	0.348± 0.018
1000ppm	10	237± 18**	0.086± 0.008	0.019± 0.002	1.279± 0.122**	0.339± 0.017**	0.369± 0.016**
2000ppm	10	203± 21**	0.086± 0.011	0.024± 0.003**	1.437± 0.089**	0.378± 0.019**	0.413± 0.021**

(HCL042) BAIS 4

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : MALE UNIT: %

ORGAN WEIGHT: RELATIVE (SUMMARY)
SURVIVAL ANIMALS (14W)

PAGE: 2

oup Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN	
Control	10	0.616± 0.020	0.184± 0.009	2.516± 0.063	0.655± 0.027	
125ppm	10	0.630± 0.012	0.184± 0.006	2.527± 0.067	0.700± 0.030	
250ppm	10	0.644± 0.021	0.182± 0.007	2.585± 0.098	0.692± 0.033	
500ppm	10	0.659± 0.010*	0.194± 0.009	2.697± 0.084*	0.711± 0.026*	
1000ppm	10	0.731± 0.044**	0.275± 0.018**	2.878± 0.165**	0.761± 0.059**	
2000ppm	10	0.795± 0.027**	0.363± 0.039**	3.112± 0.146**	0.847± 0.066**	

(HCL042)

BAIS 4

APPENDIX I 2

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : FEMALE

ORGAN WEIGHT: RELATIVE (SUMMARY)

ANIMAL : RAT F344/DuCrj SURVIVAL ANIMALS (14W)

REPORT TYPE : A1 SEX : FEMALE UNIT: %

STUDY NO. : 0435

NO. of Group Name Body Weight THYMUS ADRENALS OVARIES HEART LUNGS Animals (g) Control 10 $158\pm$ 8 $0.120\pm\ 0.012$ 0.033 ± 0.004 0.057 ± 0.006 0.361 ± 0.021 0.448 ± 0.017 125ppm 10 $153\pm$ 7 $0.121\pm\ 0.009$ 0.035 ± 0.001 0.074 ± 0.059 0.364 ± 0.015 0.468 ± 0.022 250ppm 10 $152\pm$ 7 0.119 ± 0.009 0.035 ± 0.002 0.057 ± 0.006 0.373 ± 0.014 0.458 ± 0.022 500ppm 10 $149\pm$ 3 0.117 ± 0.009 0.036± 0.003* 0.057 ± 0.007 0.362 ± 0.015 0.455 ± 0.011 1000ppm 10 $142\pm$ 4** $0.119\pm\ 0.009$ 0.037± 0.004* 0.056 ± 0.006 0.372 ± 0.018 0.470± 0.011* 2000ppm $129 \pm$ 11** 0.113 ± 0.014 0.042 ± 0.009** 0.051 ± 0.011 0.419 ± 0.028** 0.493± 0.026** Significant difference; $*: P \leq 0.05$ **: $P \leq 0.01$ Test of Dunnett

PAGE: 3

(HCL042) BAIS 4

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE UNIT: % ORGAN WEIGHT: RELATIVE (SUMMARY) SURVIVAL ANIMALS (14W)

PAGE: 4

oup Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN	
Control	10	0.673± 0.028	0.225± 0.009	2.391± 0.119	1.113± 0.057	
125ppm	10	0.694± 0.028	0.224± 0.010	2.453± 0.059	1.129± 0.047	
250ррш	10	0.709± 0.025	0.220± 0.010	2.518± 0.115	1.137± 0.064	
500ppm	10	0.725± 0.039**	0.256± 0.017	2.700± 0.080**	1.124± 0.028	
1000ppm	10	0.781± 0.034**	0.317± 0.038**	3.095± 0.218**	1.180± 0.021*	
2000ppm	9	0.893± 0.048**	0.394± 0.041**	3.588± 0.288**	1.224± 0.114**	

(HCL042)

BAIS 4

APPENDIX J 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS :

SUMMARY, RAT: MALE: SACRIFICED ANIMALS

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY) SACRIFICED ANIMALS (14W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX

: MALE

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 10 2 3 4 (%) (%) (%)	125ppm 10 10 1 2 3 4 (%) (%) (%)	250ppm 10 1 2 3 4 (%) (%) (%)	500ppm 10 10 1 2 3 4 (%) (%) (%)
{Respiratory s	system)					
nasal cavit	goblet cell hyperplasia	0 (0)	<10> 0 0 0 (0) (0) (0)	1 0 0 0 (10) (0) (0) (0)	<10> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<10> 0 0 0 0 (0) (0) (0) (0)
	inflammation:respiratory epithelium	0 (0)	0 0 0	0 0 0 0 0 (0) (0)	2 0 0 0 0 (20) (0) (0)	4 0 0 0 0 (40) (-0) (-0)
	disarrangement:olfactory epithelium	0 (0)	0 0 0 0 (0)	2 0 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)
	respiratory metaplasia:olfactory epit		0 0 0 0 (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (20) (0) (0) .	5 0 0 0 * (50) (0) (0) (0)
	atrophy:olfactory epithelium	0 (0)	0 0 0 0 (0) (0)	10 0 0 0 ** (100) (0) (0) (0)	8 2 0 0 ** (80) (20) (0) (0)	5 5 0 0 **
	necrosis:olfactory epithelium	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 (10) (0) (0) (0)
	hyperplasia:respiratory epithelium	0 (0)	0 0 0 0 (0) (0)	10 0 0 0 ** (100) (0) (0) (0)	7 3 0 0 ** (70) (30) (0) (0)	7 3 0 0**
(Hematopoieti	c system)					
oone marrow	increased hematopoiesis	0 (0)	<10> 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 0 0	1 0 0 0 (10) (0) (0) (0)
Grade (a > b (c)	1: Slight 2: Moderate 3 a: Number of animals examined at the s b: Number of animals with lesion c: b / a * 100 ifference; *: P ≤ 0.05 **: P ≤					

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY) SACRIFICED ANIMALS (14W)

REPORT TYPE : A1 SEX : MALE

Organ		Group Name No. of Animals on Study Grade	1000ppm 10 2 3 4 (%) (%) (%)	2000ppm 10 1 2 3 4 (%) (%) (%) (%)	
(Respiratory s	system}				
nasal cavit	goblet cell hyperplasia	0 (0)	<10> 0 0 0 (0) (0) (0)	(0) (0) (0) (0) 0 0 0 0 10>	
	inflammation:respiratory epithelium	6 (60)	2 0 0 ** (20) (0) (0)	4 4 0 0 ** (40)(40)(0)(0)	
	disarrangement:olfactory epithelium	3 (30)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	
	respiratory metaplasia:olfactory epit		0 0 0 ***	10 0 0 0 *** (100) (0) (0) (0)	
	atrophy:olfactory epithelium	0 (0)	8 2 0 ** (80) (20) (0)	0 3 7 0 ** (0) (30) (70) (0)	
	necrosis:olfactory epithelium	1 (10)	0 0 0 0 (0) (0)	1 0 0 0 (10) (0) (0) (0)	
	hyperplasia:respiratory epithelium	1 (10)	8 1 0 ** (80) (10) (0)	0 10 0 0 *** (0) (100) (0) (0)	
{Hematopoieti	c system)				
bone marrow	increased hematopoiesis	9 (90)	<10> 1 0 0 *** (10) (0) (0)	<pre></pre>	
Grade < a > b	1: Slight 2: Moderate 3 a: Number of animals examined at the s b: Number of animals with lesion	: Marked 4 : Severe	;		

ANIMAL : RAT F344/DuCrj

Significant difference; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

REPORT TYPE : A1 SEX : MALE SACRIFICED ANIMALS (14W)

PAGE: 3 Group Name Control 125ppm 250ppm 500ppm No. of Animals on Study 10 10 10 10 Grade 3 (%) (%) (%) (%) (%) (%) Organ_ Findings_ {Hematopoietic system} spleen <10> <10> <10> 0 0 0 deposit of hemosiderin 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (10) (0) (0) (0) increased extramedullary hematopoiesis 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) {Digestive system} liver <10> <10> herniation 0 0 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (10) (0) (0) (0) (0)(0)(0)(0) (10) (0) (0) (0) necrosis:central (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) deposit of ceroid (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) swelling:central 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) {Urinary system} kidney <10> <10> <10> <10> basophilic change 0 0 0 1 0 0 0 0 0 (20) (0) (0) (0) (0)(0)(0)(0) (10) (0) (0) (0) (10) (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

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCri

Significant difference; *: $P \le 0.05$ **: $P \le 0.01$ Test of Chi Square

REPORT TYPE : A1

SACRIFICED ANIMALS (14W)

: MALE PAGE: 4 SEX Group Name 1000ppm 2000ppm No. of Animals on Study 10 Grade (%) (%) (%) (%) Findings_ Organ____ {Hematopoietic system} spleen <10> <10> 0 10 0 ** 0 10 0 0 ** deposit of hemosiderin 0 (0) (100) (0) (0) (0)(100)(0)(0) increased extramedullary hematopoiesis 0 ** 5 5 (90) (10) (0) (0) (50) (50) (0) (0) {Digestive system} liver <10> herniation 0 0 1 0 0 . 0 (0)(0)(0)(0) (10) (0) (0) (0) necrosis:central 0 0 0 (0)(0)(0)(0) (10) (0) (0) (0) deposit of ceroid 0 (0)(0)(0)(0) (20) (0) (0) (0) swelling:central 0 ** (0)(0)(0)(0) (90) (0) (0) (0) {Urinary system} kidney <10> <10> basophilic change (10) (0) (0) (0) (0)(0)(0)(0) Grade 1 : Slight 3 : Marked 4 : Severe 2 : Moderate a: Number of animals examined at the site < a > b b: Number of animals with lesion (c) c:b/a*100

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

STUDY NO. : 0435

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE SACRIFICED ANIMALS (14W)

Group Name Control 125ppm 250ppm 500ppm No. of Animals on Study 10 10 10 Grade (%) (%) (%) (%) (%) (%) (%) (%) Organ____ Findings_ {Urinary system} kidney <10> <10> <10> 0 0 0 0 0 0 0 0 eosinophilic body (80) (0) (0) (0) (100) (0) (0) (0) (90) (0) (0) (0) (100) (0) (0) (0) 0 0 0 0 0 0 0 0 1 0 0 0 retention cyst 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (10) (0) (0) (0) mineralization:papilla 0 (10) (0) (0) (0) (30) (0) (0) (0) (20) (0) (0) (0) (20) (0) (0) (0) {Endocrine system} <10> pituitary <10> <10> <10> Rathke pouch 0 0 0 0 0 0 1 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (10) (0) (0) (0) (0)(0)(0)(0) thyroid <10> <10> <10> <10> ultimibranchial body remanet 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 (0)(0)(0)(0) (10) (0) (0) (0) (0)(0)(0)(0) (10) (0) (0) (0) adrenal <10> <10> <10> <10> 0 0 0 0 fatty change 0 0 0 0 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

(HPT150)

Significant difference; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

BAIS4

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (14W)

Group Name

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX

: MALE

1000ppm 2000ppm

Organ	Findings	No. of Animals on Study 10 Grade 1 2 3 4 (%) (%) (%) (%) (%)	10 1 2 3 4 (%) (%) (%) (%)	·
{Urinary sys	tem)			
kidney	eosinophilic body	10 0 0 0 (100) (0) (0) (0)	<10> 0 0 0 0 ** (0) (0) (0) (0)	
	retention cyst	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	
	mineralization:papilla	0 0 0 0 0 (0) (0)	2 0 0 0 0 (20) (0) (0)	
{Endocrine s	system)			
pituitary	Rathke pouch	0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	
thyroid	ultimibranchial body remanet	<10> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<10> 1 · 0 · 0 · 0 (10) (0) (0) (0)	
adrenal	fatty change	0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (10) (0) (0) (0)	
Grade <a> b (c) Significant	1: Slight 2: Moderate a: Number of animals examined at t b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **	3: Marked 4: Severe the site $P \leq 0.01 \text{Test of Chi Square}$		

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

REPORT TYPE : A1

ANIMAL

: MALE

SACRIFICED ANIMALS (14W)

Group Name Control 125ppm 250ppm 500ppm No. of Animals on Study 10 10 10 10 Grade 3 Findings_ (%) (%) (%) {Reproductive system} testis <10> <10> hypoplasia 1 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) epididymis <10> <10> <10> spermatogenic granuloma 0 0 0 0 0 0 0 0 0 0 0 (10) (0) (0) (0) (0) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) {Special sense organs/appendage} Harder gl <10> <10> <10> <10> lymphocytic infiltration 0 0 0 0 0 0 1 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (10) (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:b/a*100 Significant difference ; * : P \leq 0.05 ** : P \leq 0.01 Test of Chi Square (HPT150)

BAIS4

SEX

(HPT150)

: MALE

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY) SACRIFICED ANIMALS (14W)

REPORT TYPE : A1

ANIMAL

Group Name 1000ppm 2000ppm No. of Animals on Study 10 Grade (%) (%) (%) (%) (%) (%) Organ____ Findings_ {Reproductive system} testis <10> hypoplasia 0 0 0 0 0 0 0 0 (0) (0) (0) (0) (0)(0)(0)(0) epididymis <10> <10> spermatogenic granuloma 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) {Special sense organs/appendage} Harder gl <10> <10> lymphocytic infiltration 0 0 0 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:b/a*100 Significant difference; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

BAIS4

APPENDIX J 2

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

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0- 14W)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : FEMALE

Organ	Ī	Group Name Control No. of Animals on Study 0 Grade 1 2 3 4 (%) (%) (%) (%) (%)	125ppm 0 1 2 3 4 (%) (%) (%) (%)	250ppm 0 1 2 3 4 (%) (%) (%) (%)	500ppm 0 0 1 2 3 4 (%) (%) (%) (%)
{Respiratory	system)				
nasal cavit	inflammation:respiratory epithelium	< 0> (-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) () (-)
	respiratory metaplasia:olfactory epith	(-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)
	atrophy:olfactory epithelium	(-) (-) (-) (-)	(-) (-) (-)	(-) (-) (-)	(-) (-) (-) (-)
	hyperplasia:respiratory epithelium	(-) (-) (-) (-)	(-) (-) (-)	(-) (-) (-)	(-) (-) (-) (-)
ung	congestion	< 0> (-) (-) (-) (-)	(-) (-) (-) (-)	< 0> (-) (-) (-) (-)	< 0> (-) (-) (-) (-)
(Hematopoieti	c system)				
oone marrow	increased hematopoiesis	< 0> (-) (-) (-) (-)	(-) (-) (-)	< 0> (-) (-) (-) ()	(-) (-) (-) (-)
Grade (a >	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b/a * 100	: Marked 4 : Severe te			

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0- 14W)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : FEMALE

PAGE: 2

Organ	Group N. No. of . Grade Findings	Animals on Study 0 1000ppm \[\frac{1}{\%} & \frac{2}{\%} & \frac{3}{\%} & \frac{4}{\%} \]	2000ppm 1 1 2 3 4 (%) (%) (%) (%)	
{Respiratory	system}			
nasal cavit	inflammation:respiratory epithelium	< 0> (-) (-) (-) (-)	<pre></pre>	
	respiratory metaplasia:olfactory epithelium	 (-) (-) (-) (-)	1 0 0 0 (100) (0) (0) (0)	
	atrophy:olfactory epithelium	(-) (-) (-) (-)	1 0 0 0 (100) (100) (100)	
	hyperplasia:respiratory epithelium	(-) (-) (-) (-)	0 1 0 0 (0) (100) (0) (0)	
lung	congestion	< 0> (-) (-) (-) (-)	<pre></pre>	
{Hematopoieti	c system}			
bone marrow	increased hematopoiesis	< 0> (-) (-) (-) (-)	1 0 0 0 (100) (0) (0) (0)	
Grade (a > b (c)	1: Slight 2: Moderate 3: Marke a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100	d 4: Severe		

(HPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0- 14W)

REPORT TYPE : A1

SEX : FEMALE

ANIMAL : RAT F344/DuCrj

Organ	No	roup Name Control o. of Animals on Study 0 rade 1 2 3 4 (%) (%) (%) (%)	125ppm 0 1 2 3 4 (%) (%) (%) (%)	250ppm 0 0 1 2 3 4 (%) (%) (%) (%)	500ppm 0 1 2 3 4 (%) (%) (%) (%)
{Hematopoie	tic system)				
thymus		⟨ 0⟩	< 0>	< 0>	< 0>
	hemorrhage	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) () (-) (-)
spleen		< 0>	< 0>	< 0>	< 0>
deposit of hemosiderin	deposit of nemosiderin	(-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-)
{Digestive	system}				
liver		< 0>	< 0>	< 0>	< 0>
	necrosis:central	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)
	fatty change:central	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)
{Endocrine	system)				
adrenal		< 0>	< 0>	< 0>	< 0>
	fatty change	(-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)	(-) (-) (-) (-)
Grade < a > b (c)	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b/a*100	Marked 4: Severe			7

: RAT F344/DuCri

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL REPORT TYPE : A1

: FEMALE SEX

DEAD AND MORIBUND ANIMALS (0- 14W)

PAGE: 4 Group Name 1000ppm 2000ppm No. of Animals on Study

3 4 (%) (%) (%) (%) (%) (%) Organ____ Findings__

{Hematopoietic system}

thymus

hemorrhage

spleen

deposit of hemosiderin

{Digestive system}

liver

necrosis:central

fatty change:central

{Endocrine system}

adrenal

fatty change

Grade

1 : Slight 2 : Moderate

3 : Marked

4 : Severe

< a >

b

a: Number of animals examined at the site

b: Number of animals with lesion

(c)

c:b/a*100

(HPT150)

BAIS4

ANIMAL

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0- 14W)

REPORT TYPE : A1

: FEMALE

Group Name Control 125ppm 250ppm 500ppm No. of Animals on Study Grade (%) (%) (%) (%) (%) Organ____ Findings_ {Special sense organs/appendage} Harder gl lymphocytic infiltration (-) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-) 1 : Slight 2 : Moderate 3 : Marked 4 : Severe Grade < a > a: Number of animals examined at the site b b: Number of animals with lesion (c) c:b/a*100 BAIS4 (HPT150)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 : FEMALE SEX

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0- 14W)

Group Name 1000ppm 2000ppm No. of Animals on Study 3 4 Organ____ Findings__ (%) (%) (%) (%) (%) {Special sense organs/appendage} Harder gl < 0> < 1> lymphocytic infiltration 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 (HPT150)

BAIS4

APPENDIX J 3

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

(13-WEEK STUDY)

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY) SACRIFICED ANIMALS (14W)

REPORT TYPE : A1 SEX

: FEMALE

Organ	Findings	Group Name No. of Animals on Study Grade	. 2	10 3	 <u>4</u> (%)	1 (%)	2 (%)	12 10 		1 <u>4</u> (%)	1(%)	2	10	50pp 3 %)	4 (%)	1 (%)	2 (%	10	00ppn <u>3</u> %)	4 (%)
					 									.,•,						
{Respiratory s	system)																			
nasal cavit	inflammation:respiratory epithelium	0 (0		(10> 0 (0	0 0)	0 (0)	0	10> 0 (0		0 0)	0 (0)	0		0 0) (0 ()	0 (0)	0		0 0) (0 0)
	disarrangement:olfactory epithelium	, c	0 (0)	0 (0	0 0)	0 (0)	0 (0)	0 (0)) (0 0)	2 (20)	0		0 0) (0 (0)	1 (10)	0 (0		0 0) (0 0)
	respiratory metaplasia:olfactory epi) ()) (0)	0	0 0)	0 (0)	0 (0)	0))) (0	1 (10)	0 (0		0 0) (0 ()	7 (70)	0		0 0) (0 ** 0)
	atrophy:olfactory epithelium	, c	0 (0)	0	0	10 (100)	0 (0)	(0		0 ** 0)	10 (100)	0)		0 0) (0 ** (0)	9 (90)	1 (10		0 0) (0 ** 0)
	necrosis:olfactory epithelium	(0	0 0)	0 (0	0 0)	0 (0)	0 (0)	0 (0		0 0)	1 (10)	0		0 0) (0 (0)	3 (30)	(0		0 0) (0
	hyperplasia:respiratory epithelium	(c	0) (0)	0	0 0)	7 (70)	0 (0)	(0		0 **	10 (100)	0 (0		0 0) (0 **	9 (90)	0		0 0) (0 ** 0)
{Hematopoietic	c system)																			
bone marrow	increased hematopoiesis	0)			0 0)	0 (0)	0			0 0)	0 (0)	0		0 0) (0 (0)	0 (0)	0		0 0) (0 0)
< a > b	a : Number of animals examined at the b : Number of animals with lesion c : b / a * 100 $$																			

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (14W)

Group Name

: RAT F344/DuCrj REPORT TYPE : A1

ANIMAL

SEX

: FEMALE

1000ppm 2000ppm

Organ	Findings	No. of Animals on Study Grade		3 4 (%) (%)	1 (%)	2000pp 9 2 3 %) (%)	4 (%)		
{Respiratory s	system)								
nasal cavit	inflammation:respiratory epithelium		0 3 0) (30)	0 0 (0) (0)	3 (33) (1	< 9> 1 0 1) (0)	0 (0)		
	disarrangement:olfactory epithelium		0 0 0 0 0 0 0	0 0 (0) (0)		0 0 0	0 (0)		
	respiratory metaplasia:olfactory epit		9 0	0 0 **		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ** (0)		
	atrophy:olfactory epitholium		0 0 0 00) (0)	0 0 ***		4 3 44) (33)	0 **		
	necrosis:olfactory epithelium		1 0	0 0 (0) (0)		0 0 0 0 0) (0)	0 (0)		
	hyperplasia:respiratory epithelium		8 2 30) (20)	0 0 **		1 0	0 **		
{Hematopoietic	c system)								
bone marrow	increased hematopoiesis		<10 0 0 00) (0)	0 0 *** (0) (0)		< 9> 2 1 22) (11)	0 ** (0)		
<pre>d a > b (c)</pre>	1: Slight 2: Moderate 3 a: Number of animals examined at the s b: Number of animals with lesion c: b / a * 100 ifference; *: P ≤ 0.05 **: P ≤						·		

(HPT150)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

: FEMALE PAGE: 11 250ppm 500ppm Group Name Control 125ppm No. of Animals on Study 10 10 10 10 Grade Findings_ (%) (%) (%) (%) (%) (%) (%) (%) (%) Organ____ {Hematopoietic system} <10> <10> <10> <10> spleen 0 0 0 ** deposit of hemosiderin 0 (0)(0)(0)(0) (0)(0)(0)(0) (40) (0) (0) (0) (80) (20) (0) (0) increased extramedullary hematopoiesis 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (10) (0) (0) (0) {Digestive system} liver <10> <10> <10> 2 0 0 0 0 0 0 0 0 0 0 0 0 herniation (20) (0) (0) (0) (0)(0)(0)(0) (10) (0) (0) (0) (0)(0)(0)(0) necrosis:central 0 0 0 0 0 . 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) fatty change:central 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) deposit of ceroid 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) extramedullary hematopoiesis 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0)

1 : Slight Grade

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

(HPT150)

BAIS4

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj

EX : FEMALE

SACRIFICED ANIMALS (14W)

REPORT TYPE : A1

Organ	Group Name No. of Animal Grade	s on Study 1000ppm 1000ppm 1000ppm 1000ppm 1000ppm 1000ppm 1000ppm 1000ppm 1000ppm	2000ppm 9 1 2 3 4 (%) (%) (%) (%)	
{Hematopoie	tic system)			
spleen	deposit of hemosiderin	3 7 0 0 *** (30) (70) (0) (0)	<pre></pre>	
	increased extramedullary hematopoiesis	6 2 0 0 ** (60) (20) (0) (0)	4 5 0 0 ** (44) (56) (0) (0)	
{Digestive	system)			
liver	hermiation	2 0 0 0 (20) (0) (0)	<pre></pre>	
	necrosis:central	0 0 0 0 0 (0) (0)	1 2 0 0 (11) (22) (0) (0)	
	fatty change:central	0 0 0 0 0 (0) (0)	1 0 0 0 (11) (0) (0) (0)	
	deposit of ceroid	0 0 0 0 0 (0) (0)	6 0 0 0 ** (67) (0) (0) (0)	
	extramedullary hematopoiesis	0 0 0 0 0 (0) (0)	1 0 0 0 0 (11) (0) (0) (0)	
Grade <a> b (c) Significant	1: Slight 2: Moderate 3: Marked a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100 tdifference; *: P ≤ 0.05 **: P ≤ 0.01 Tes	4 : Severe		

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE SACRIFICED ANIMALS (14W)

Control Group Name 125ppm 250ppm 500ppm No. of Animals on Study 10 10 10 10 3 Findings Organ {Digestive system} liver swelling:central 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0) (0) (0) (0) (0)(0)(0)(0) (Urinary system) kidnev <10> <10> <10> 0 0 0 0 0 0 0 0 0 0 0 0 mineralization:papilla (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) {Endocrine system} pituitary <10> <10> <10> <10> Rathke pouch 0 0 0 0 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) thyroid <10> <10> <10> <10> ultimibranchial body remanet 2 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 (20) (0) (0) (0) (0)(0)(0)(0) (10) (0) (0) (0) (10) (0) (0) (0) adrenal <10> <10> <10> fatty change 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) 1 : Slight 2 : Moderate 3 : Marked 4 : Severe Grade < a > a : Number of animals examined at the site b b : Number of animals with lesion (c) c:b/a*100 Significant difference; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square

(HPT150)

BAIS4

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (14W)

swelling:central 1 0 0

1 0 0 0 1 5 0 0 ***
(10) (0) (0) (0) (11) (56) (0) (0)

{Urinary system}

{Endocrine system}

pituitary

 Rathke pouch
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thyroid $\langle 10 \rangle$ $\langle 9 \rangle$ ultimibranchial body remanet 1 0 0 0 1 0 0

adrenal (10) (9) fatty change 1 1 0 0 3 6 0 0 **
(10) (10) (0) (0) (33) (67) (0) (0)

Grade 1: Slight 2: Moderate 3: Marked 4: Severe

< a > a : Number of animals examined at the site

b : Number of animals with lesion

(c) c:b/a*100

Significant difference ; * * : P \leq 0.05 ** : P \leq 0.01 Test of Chi Square

(HPT150)

BAIS4

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (14W)

REPORT TYPE : A1

ANIMAL

: FEMALE

: RAT F344/DuCrj

Group Name Control 125ppm 250ppm 500ppm No. of Animals on Study 10 10 10 10 Findings_ {Reproductive system} <10> <10> ovary 1 0 0 0 0 0 0 0 cyst 0 0 0 0 0 (0)(0)(0)(0) (10) (0) (0) (0) (10) (0) (0) (0) (0)(0)(0)(0) {Special sense organs/appendage} Harder gl <10> <10> <10> lymphocytic infiltration 0 0 0 3 0 0 0 0 0 0 0 (40) (0) (0) (0) (30) (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 Significant difference; * : $P \le 0.05$ ** : $P \le 0.01$ Test of Chi Square (HPT150)

BAIS4

ANIMAL : RAT F344/DuCrj HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (14W)

REPORT TYPE : A1

SEX : FEMALE PAGE: 16

Organ	Group No. o Grade Findings	f Animals on Study 10	2000ppm 9 1 2 3 4 (%) (%) (%)	
{Reproductiv	ve system)			
ovary	cyst	<10> 0 0 0 0 0 0 0 0 0 0 0	<pre></pre>	
{Special sen	nse organs/appendage)			
Harder gl	lymphocytic infiltration	3 0 0 0 (30) (0) (0) (0)	<pre> 4 0 0 0 (44) (0) (0) (0)</pre>	
Grade <a> a > b (c) Significant	1: Slight 2: Moderate 3: Mar a: Number of animals examined at the site b: Number of animals with lesion c: b/a*100 difference; *: $P \le 0.05$ **: $P \le 0.01$			
(HPT150)				BAIS4

APPENDIX K 1

IDENTITY OF 1,2-DICHLOROPROPANE IN THE 13-WEEK INHALATION STUDY

IDENTITY OF 1,2-DICHLOROPROPANE IN THE 13-WEEK INHALATION STUDY

Test Substance: 1,2-Dichloropropane (Wako Pure Chemical Industries, Ltd.)

Lot No. : LDL5937

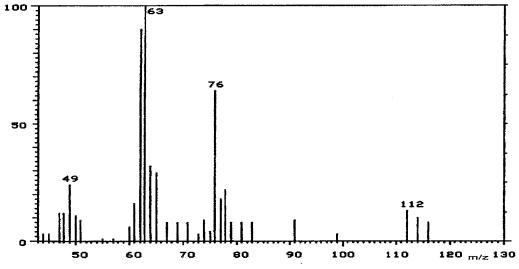
1. Spectral Data

Mass Spectrometry

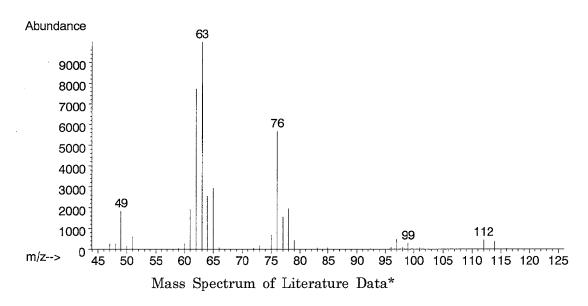
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Result: The mass spectrum was consistent with literature spectrum.

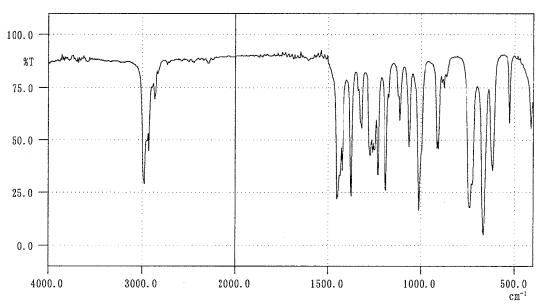
(*McLafferty F. W. (1994)
Wiley Registry of Mass Spectral Data, (6th edition), Entry Number 10229.
John Wiley and Sons, New York, NY)

Infrared Spectrometry

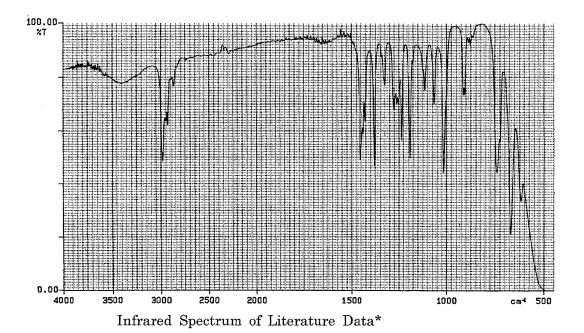
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm⁻¹



Infrared Spectrum of Test Substance



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

2. Conclusion: The test substance was identified as 1,2-dichloropropane by the mass spectrum and the infrared spectrum.

APPENDIX K 2

STABILITY OF 1,2-DICHLOROPROPANE IN THE 13-WEEK INHALATION STUDY

STABILITY OF 1,2-DICHLOROPROPANE IN THE 13-WEEK INHALATION STUDY

Test Substance : 1,2-Dichloropropane (Wako Pure Chemical Industries, Ltd.)

Lot No. : LDL5937

1. Sample : This lot was used from 2001.8.28 to 2001.11.26. Test substance was

stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

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

Column Temperature: 100° C

Flow Rate : 15 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2001.08.21	1	3.348	99.72
	2	4.659	0.28
2001.12.17	1	3.347	99.71
	2	4.658	0.29

Result: Gas chromatography indicated one major peak (peak No.1) and one impurity (peak No.2 < 0.3% of total area) analyzed on 2001.8.21 and one major peak (peak No.1) and one impurity (peak No.2 < 0.3% of total area) analyzed on 2001.12.17. No new trace impurity peak in the test substance analyzed on 2001.12.17 was detected.

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

APPENDIX L 1

CONCENTRATION OF 1,2-DICHLOROPROPANE IN THE INHALATION CHAMBER OF THE 13-WEEK INHALATION STUDY

CONCENTRATION OF 1,2-DICHLOROPROPANE IN THE INHALATION CHAMBER OF THE 13-WEEK INHALATION STUDY

Group Name	Concentration(ppm) $Mean \pm S.D.$
Control	0.0 ± 0.0
$125~\mathrm{ppm}$	125.3 ± 0.7
$250~\mathrm{ppm}$	250.8 ± 1.0
500 ppm	500.5 ± 2.6
$1000~\mathrm{ppm}$	1000.4 ± 3.4
$2000~\mathrm{ppm}$	2001.3 ± 5.9

APPENDIX L 2

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 13-WEEK INHALATION STUDY OF 1,2-DICHLOROPROPANE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 13-WEEK INHALATION STUDY OF 1,2-DICHLOROPROPANE

Group Name	Temperature($^{\circ}$ C) Mean \pm S.D.	Humidity(%) Mean \pm S.D.	Ventilation Rate(L/min) Mean \pm S.D.	Air Change(time/h) Mean
Control	22.0 ± 0.3	57.5 ± 0.9	212.2 ± 0.8	12.0
125ppm	21.9 ± 0.4	56.8 ± 1.3	211.9 ± 1.6	12.0
250ppm	22.2 ± 0.4	55.9 ± 1.1	212.0 ± 0.8	12.0
500ppm	22.2 ± 0.3	55.0 ± 1.1	211.8 ± 0.9	12.0
1000ppm	21.9 ± 0.3	55.6 ± 1.1	212.3 ± 0.8	12.0
2000ppm	22.6 ± 0.3	54.5 ± 1.2	212.3 ± 0.9	12.0

APPENDIX M 1

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 13-WEEK INHALATION STUDY OF 1,2-DICHLOROPROPANE

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 13-WEEK INHALATION STUDY OF 1,2-DICHLOROPROPANE

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	Calculated as Hgb/Hct×100 1)
(MCHC)	Light scattering method 1)
Platelet	Light scattering method 1)
Reticulocyte	Quick one stage method 2)
Prothrombin time	Ellagic acid activaterd method 2)
Activated partial thromboplastin time (APTT)	Light scattering method 1)
White blood cell (WBC)	Pattern recognition method ³⁾
Differential WBC	(Wright staining)
Biochemistry	
Total protein (TP)	Biuret method ⁴⁾
Albumin (Alb)	BCG method ⁴⁾
A/G ratio	Calculated as Alb/(TP-Alb) 4)
T-bilirubin	Alkaline azobilirubin method 4)
Glucose	GlcK·G-6-PDH method 4)
T-cholesterol	CE·COD·POD method 4)
Triglyceride	LPL·GK·GPO·POD method 4)
Phospholipid	PLD·ChOD·POD method 4)
Glutamic oxaloacetic transaminase (GOT)	JSCC method ⁴⁾
Glutamic pyruvic transaminase (GPT)	JSCC method ⁴⁾
Lactate dehydrogenase (LDH)	SFBC method 4)
Alkaline phosphatase (ALP)	GSCC method 4)
γ -Glutamyl transpeptidase (γ -GTP)	L- γ -Glutamyl-p-nitroanilide method ⁴⁾
Creatine phosphokinase (CPK)	JSCC method 4)
Urea nitrogen	Urease GLDH method 4)
Creatinine	Jaffe method 4)
Sodium	Ion selective electrode method 4)
Potassium	Ion selective electrode method 4)
Chloride	Ion selective electrode method 4)
Calcium	OCPC method 4)
Inorganic phosphorus	PNP·XOD·POD method 4)
Urinalysis	Ilminolynia magazint assessing (15)
pH,Protein,Glucose,Ketone body,Bilirubin,Occult	Urinalysis reagent paper method 5)
blood,Urobilinogen	

- 1) Automatic blood cell analyzer (ADVIA120: Bayer Corporation)
- 2) Automatic coagulometer (Sysmex CA-5000 : Sysmex Corporation)
- 3) Automatic blood cell differential analyzer (MICROX HEG-120NA: OMRON Corporation)
- 4) Automatic analyzer (Hitachi 7070: Hitachi, Ltd.)
- 5) Ames reagent strips for urinalysis (Multistix: Bayer Corporation)

APPENDIX M 2

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 13-WEEK INHALATION STUDY OF 1,2-DICHLOROPROPANE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 13-WEEK INHALATION STUDY OF 1,2-DICHLOROPROPANE

Hematology Red blood cell (RBC) X10 s / μ L 2 Hemoglobin g/dL 1 Hematocrit % 1 Mean corpuscular volume (MCV) ffL 1 Mean corpuscular hemoglobin (MCH) pg 1 Mean corpuscular hemoglobin concentration (MCHC) g/dL 1 Platelet X10 s / μ L 0 Reticulocyte % 1 Prothrombin time sec 1 Activated partial thromboplastin time (APTT) sec 1 White blood cell (WBC) X10 s / μ L 2 Differential WBC % 0 Biochemistry Total protein 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 Clutamic phosphatase (ALP) IU/L 0 Creatine phosphokinase (CPK) IU/L 0 Creatinine mg/dL 1 Potassium mg/dL 1 Chloride me/dL 1 Ingranic phosphorus mg/dL 1 Ingranic	Item	Unit	Decimal place
Red blood cell (RBC) $\times 10^6 / \mu L$ 2 Hemoglobin g/dL 1 Hematocrit % 1 Mean corpuscular volume (MCV) ftL 1 Mean corpuscular hemoglobin (MCH) pg 1 Mean corpuscular hemoglobin concentration (MCHC) g/dL 1 Platelet $\times 10^3 / \mu L$ 0 Reticulocyte % 1 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 $\times 10^3 / \mu L$ 2 Total protein g/dL 1 Albumin g/dL 1 A/G ratio - 1 Totilirubin mg/dL 0 Glucose mg/dL 0 T-cholesterol mg/dL 0 Triglyceride mg/dL 0 Phospholipid mg/dL 0 Glutamic oxaloacetic transaminase (GPT) IU/L 0 <td< td=""><td>Hematology</td><td></td><td></td></td<>	Hematology		
Hemoglobin Hematocrit Hematocrit Mean corpuscular volume (MCV) fL 1 Mean corpuscular hemoglobin (MCH) pg 1 Mean corpuscular hemoglobin (MCH) pg 1 Mean corpuscular hemoglobin concentration (MCHC) g/dL 1 Platelet ×10³/μL 0 Reticulocyte % 1 Prothrombin time sec 1 Activated partial thromboplastin time (APTT) sec 1 White blood cell (WBC) ×10³/μL 2 Differential WBC % 0 Biochemistry Total protein g/dL 1 A/G ratio - 1 T-bilirubin g/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 Alkaline phosphatase (ALP) IU/L 0 Creatine phosphokinase (CPK) IU/L 0 Urea nitrogen mg/dL 1 Creatinine mg/dL 1 Creatinine mg/dL 1 Creatinine mg/dL 1 Chloride mg/dL 0 Tellirubin mg/dL 1 Chloride mg/dL 0 Creatine mg/dL 1 Chloride mg/dL 1 Chlor		×10 ⁶ /μL	2
Hematocrit	, ,		
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Mean corpuscular hemoglobin (MCH) pg 1 Mean corpuscular hemoglobin concentration (MCHC) g/dL 1 Platelet $\times 10^3/\mu L$ 0 Reticulocyte % 1 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 % 0 Total protein 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 Creatinine mg/dL			
Mean corpuscular hemoglobin concentration (MCHC) g/dL 1 Platelet $\times 10^3/\mu$ L 0 Reticulocyte % 1 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 % 0 Total protein g/dL 1 Albumin g/dL 1 A/G ratio - 1 T-bilirubin mg/dL 0 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			Ī .
Platelet $\times 10^3/\mu\mathrm{L}$ 0 Reticulocyte $\%$ 1 Prothrombin time $\%$ 1 Sec 1 Activated partial thromboplastin time (APTT) Sec 1 $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 2 Differentia	, ,	l	
Reticulocyte Prothrombin time sec 1 Activated partial thromboplastin time (APTT) sec 1 White blood cell (WBC) $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Albumin $\times 10^3/\mu\mathrm{L}$ 1 Albumin $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\times 10^3/\mu\mathrm{L}$ 1 Differential WBC $\times 10^3/\mu\mathrm{L}$ 2 Diffe			
Prothrombin time Activated partial thromboplastin time (APTT) sec 1 White blood cell (WBC) $\times 10^3/\mu L$ 2 Differential WBC $\%$ 0 Biochemistry $\%$ 0 Biochemistry $\%$ 10 Biochemistry $\%$ 10 Biochemistry $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 2 $\%$ 2 $\%$ 3 $\%$ 2 $\%$ 2 $\%$ 3 $\%$ 3 $\%$ 2 $\%$ 3 $\%$ 4 $\%$ 4 $\%$ 2 $\%$ 3 $\%$ 4 $\%$ 5 $\%$ 5 $\%$ 6 Biochemistry $\%$ 2 $\%$ 3 $\%$ 4 $\%$ 5 $\%$ 5 $\%$ 6 Biochemistry $\%$ 2 $\%$ 3 $\%$ 4 $\%$ 5 $\%$ 6 Biochemistry $\%$ 2 $\%$ 6 Biochemistry $\%$ 2 $\%$ 2 $\%$ 3 $\%$ 6 $\%$ 2 $\%$ 4 $\%$ 5 $\%$ 6 Biochemistry $\%$ 2 $\%$ 6 $\%$ 6 Biochemistry $\%$ 8 $\%$ 9 $\%$ 9 $\%$ 1 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 2 $\%$ 3 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 8 $\%$ 9 $\%$ 9 $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 3 $\%$ 6 $\%$ 1 $\%$ 6 $\%$ 1 $\%$ 6 $\%$ 1 $\%$ 1 $\%$ 6 $\%$ 1 $\%$ 1 $\%$ 6 $\%$ 9 $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 1 $\%$ 2 $\%$ 3 $\%$ 3 $\%$ 2 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 4 $\%$ 3 $\%$ 3 $\%$ 3 $\%$ 4 $\%$ 5 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 6 $\%$ 7 $\%$ 9 $\%$		l '	
Activated partial thromboplastin time (APTT) sec 1 White blood cell (WBC) $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\%$ 0 Biochemistry $\%$ Total protein $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$	1		
White blood cell (WBC) $\times 10^3/\mu\mathrm{L}$ 2 Differential WBC $\%$ 0 Biochemistry Total protein g/dL 1 g/dL 2 g/dL 1 g/dL 2 g/dL 1 g/dL 2 g/dL 0 g/dL 1 g/dL 0 g/dL 1 g/dL 0 g/dL 1		·	
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Calcium mg/dL 1	Chloride		0
			1
ALLON DURANCE DITROPTION OF THE TANK OF TH	Inorganic phosphorus	mg/dL	1