4-*tert*-ブチルカテコールのラットを用いた
経口投与による 13 週間毒性試験（混餌試験）報告書

試験番号：0719

TABLES

TABLES

TABLES (CONTINUED)

TABLE A 1

SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 13
SEX : MALE

SURVIVAL ANIMAL NUMBERS

Group Name	Animals At start	Administration (Weeks) 0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
256 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
640 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1600 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
4000 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10000 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Number of survival/ Number of effective animals
Survival rate(%)

TABLE A 2

SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 13
SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

Group Name	Animals At start	Administration (Weeks) 0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
256 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
640 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1600 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
4000 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10000 ppm	10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Number of survival/ Number of effective animals
Survival rate(%)

TABLE B 1

CLINICAL OBSERVATION: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 13

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 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
NON REMARKABLE	Control	10	10	10	10	10	10	10	10	10	10	10	10	10
	256 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10
	640 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10
	1600 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10
	4000 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10
	10000 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10

TABLE B 2

CLINICAL OBSERVATION: FEMALE

Clinical sign	Group Name	Administration Week-day 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
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0
	256 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	640 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0
	1600 ppm	0	0	0	0	0	2	2	2	1	1	1	1	1
	4000 ppm	0	0	2	1	1	6	6	6	5	5	5	4	3
	10000 ppm	1	1	6	6	6	10	10	10	10	9	8	8	3
NON REMARKABLE	Control	10	10	10	10	10	10	10	10	10	10	10	10	10
	256 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10
	640 ppm	10	10	10	10	10	10	10	10	10	10	10	10	10
	1600 ppm	10	10	10	10	10	8	8	8	9	9	9	9	9
	4000 ppm	10	10	8	9	9	4	4	4	5	5	5	6	7
	10000 ppm	9	9	4	4	4	0	0	0	0	1	2	2	7

TABLE C 1

BODY WEIGHT CHANGES AND

SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

Week on Study	Control Av. Wt.	Control No. of Surviv. <10>	256 ppm Av. Wt.	256 ppm % of cont. <10>	256 ppm No. of Surviv.	640 ppm Av. Wt.	640 ppm % of cont. <10>	640 ppm No. of Surviv.	1600 ppm Av. Wt.	1600 ppm % of cont. <10>	1600 ppm No. of Surviv.	4000 ppm Av. Wt.	4000 ppm % of cont. <10>	4000 ppm No. of Surviv.	10000 ppm Av. Wt.	10000 ppm % of cont. <10>	10000 ppm No. of Surviv.
0	120 (10)	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10	120 (10)	100	10/10
1	149 (10)	10/10	150 (10)	101	10/10	151 (10)	101	10/10	150 (10)	101	10/10	143 (10)	96	10/10	131 (10)	88	10/10
2	182 (10)	10/10	185 (10)	102	10/10	185 (10)	102	10/10	180 (10)	99	10/10	172 (10)	95	10/10	154 (10)	85	10/10
3	209 (10)	10/10	213 (10)	102	10/10	212 (10)	101	10/10	207 (10)	99	10/10	198 (10)	95	10/10	176 (10)	84	10/10
4	232 (10)	10/10	235 (10)	101	10/10	234 (10)	101	10/10	228 (10)	98	10/10	219 (10)	94	10/10	193 (10)	83	10/10
5	250 (10)	10/10	253 (10)	101	10/10	251 (10)	100	10/10	245 (10)	98	10/10	238 (10)	95	10/10	208 (10)	83	10/10
6	264 (10)	10/10	269 (10)	102	10/10	266 (10)	101	10/10	258 (10)	98	10/10	252 (10)	95	10/10	219 (10)	83	10/10
7	278 (10)	10/10	283 (10)	102	10/10	281 (10)	101	10/10	272 (10)	98	10/10	263 (10)	95	10/10	231 (10)	83	10/10
8	290 (10)	10/10	296 (10)	102	10/10	294 (10)	101	10/10	283 (10)	98	10/10	275 (10)	95	10/10	237 (10)	82	10/10
9	303 (10)	10/10	310 (10)	102	10/10	308 (10)	102	10/10	296 (10)	98	10/10	286 (10)	94	10/10	247 (10)	82	10/10
10	312 (10)	10/10	318 (10)	102	10/10	315 (10)	101	10/10	303 (10)	97	10/10	295 (10)	95	10/10	256 (10)	82	10/10
11	321 (10)	10/10	325 (10)	101	10/10	325 (10)	101	10/10	313 (10)	98	10/10	304 (10)	95	10/10	263 (10)	82	10/10
12	328 (10)	10/10	332 (10)	101	10/10	333 (10)	102	10/10	319 (10)	97	10/10	309 (10)	94	10/10	268 (10)	82	10/10
13	333 (10)	10/10	338 (10)	102	10/10	337 (10)	101	10/10	324 (10)	97	10/10	314 (10)	94	10/10	270 (10)	81	10/10

< >:No. of effective animals, ( ):No. of measured animals Av. Wt. : g

TABLE C 2

BODY WEIGHT CHANGES AND

SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

MEAN BODY WEIGHTS AND SURVIVAL

Week on Study	Control Av. Wt.	Control No. of Surviv. <10>	256 ppm Av. Wt.	256 ppm % of cont. <10>	256 ppm No. of Surviv.	640 ppm Av. Wt.	640 ppm % of cont. <10>	640 ppm No. of Surviv.	1600 ppm Av. Wt.	1600 ppm % of cont. <10>	1600 ppm No. of Surviv.	4000 ppm Av. Wt.	4000 ppm % of cont. <10>	4000 ppm No. of Surviv.	10000 ppm Av. Wt.	10000 ppm % of cont. <10>	10000 ppm No. of Surviv.
0	97 (10)	10/10	97 (10)	100	10/10	97 (10)	100	10/10	97 (10)	100	10/10	97 (10)	100	10/10	97 (10)	100	10/10
1	113 (10)	10/10	112 (10)	99	10/10	113 (10)	100	10/10	110 (10)	97	10/10	109 (10)	96	10/10	101 (10)	89	10/10
2	126 (10)	10/10	124 (10)	98	10/10	125 (10)	99	10/10	123 (10)	98	10/10	121 (10)	96	10/10	113 (10)	90	10/10
3	137 (10)	10/10	134 (10)	98	10/10	137 (10)	100	10/10	132 (10)	96	10/10	130 (10)	95	10/10	121 (10)	88	10/10
4	145 (10)	10/10	142 (10)	98	10/10	143 (10)	99	10/10	139 (10)	96	10/10	137 (10)	94	10/10	128 (10)	88	10/10
5	155 (10)	10/10	149 (10)	96	10/10	150 (10)	97	10/10	147 (10)	95	10/10	142 (10)	92	10/10	133 (10)	86	10/10
6	159 (10)	10/10	155 (10)	97	10/10	156 (10)	98	10/10	152 (10)	96	10/10	146 (10)	92	10/10	138 (10)	87	10/10
7	164 (10)	10/10	159 (10)	97	10/10	161 (10)	98	10/10	155 (10)	95	10/10	150 (10)	91	10/10	141 (10)	86	10/10
8	170 (10)	10/10	162 (10)	95	10/10	164 (10)	96	10/10	157 (10)	92	10/10	152 (10)	89	10/10	145 (10)	85	10/10
9	174 (10)	10/10	165 (10)	95	10/10	168 (10)	97	10/10	162 (10)	93	10/10	157 (10)	90	10/10	147 (10)	84	10/10
10	178 (10)	10/10	170 (10)	96	10/10	172 (10)	97	10/10	165 (10)	93	10/10	159 (10)	89	10/10	150 (10)	84	10/10
11	181 (10)	10/10	172 (10)	95	10/10	175 (10)	97	10/10	169 (10)	93	10/10	164 (10)	91	10/10	155 (10)	86	10/10
12	183 (10)	10/10	174 (10)	95	10/10	178 (10)	97	10/10	172 (10)	94	10/10	167 (10)	91	10/10	157 (10)	86	10/10
13	187 (10)	10/10	177 (10)	95	10/10	180 (10)	96	10/10	173 (10)	93	10/10	169 (10)	90	10/10	159 (10)	85	10/10

< >:No. of effective animals, ( ):No. of measured animals Av. Wt. : g

TABLE C 3

BODY WEIGHT CHANGES: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 0	1	2	3	4	5	6
Control	120± 3	149± 5	182± 6	209± 7	232± 8	250± 9	264± 9
256 ppm	120± 3	150± 5	185± 6	213± 7	235± 8	253± 9	269± 12
640 ppm	120± 3	151± 7	185± 10	212± 12	234± 13	251± 13	266± 14
1600 ppm	120± 3	150± 5	180± 7	207± 8	228± 8	245± 9	258± 9
4000 ppm	120± 3	143± 6*	172± 7*	198± 8*	219± 8**	238± 9*	252± 9*
10000 ppm	120± 3	131± 3**	154± 5**	176± 6**	193± 7**	208± 8**	219± 9**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 7	8	9	10	11	12	13
Control	278± 8	290± 9	303± 10	312± 10	321± 12	328± 12	333± 12
256 ppm	283± 12	296± 14	310± 12	318± 15	325± 15	332± 14	338± 15
640 ppm	281± 14	294± 14	308± 14	315± 13	325± 14	333± 15	337± 16
1600 ppm	272± 10	283± 11	296± 13	303± 13	313± 14	319± 13	324± 12
4000 ppm	263± 10*	275± 10*	286± 11*	295± 10**	304± 10*	309± 9**	314± 11**
10000 ppm	231± 9**	237± 9**	247± 9**	256± 9**	263± 9**	268± 11**	270± 11**

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

TABLE C 4

BODY WEIGHT CHANGES: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 0	1	2	3	4	5	6
Control	97± 3	113± 4	126± 4	137± 6	145± 7	155± 7	159± 8
256 ppm	97± 3	112± 5	124± 6	134± 5	142± 7	149± 7	155± 8
640 ppm	97± 3	113± 3	125± 4	137± 5	143± 5	150± 5	156± 5
1600 ppm	97± 3	110± 5	123± 6	132± 7	139± 8	147± 7*	152± 9
4000 ppm	97± 3	109± 3	121± 4	130± 5*	137± 6*	142± 6**	146± 6**
10000 ppm	97± 3	101± 3**	113± 4**	121± 6**	128± 6**	133± 6**	138± 7**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 7	8	9	10	11	12	13
Control	164± 8	170± 9	174± 11	178± 11	181± 10	183± 9	187± 10
256 ppm	159± 9	162± 9	165± 9	170± 9	172± 11	174± 9	177± 9
640 ppm	161± 5	164± 6	168± 6	172± 5	175± 5	178± 7	180± 6
1600 ppm	155± 10	157± 10**	162± 11*	165± 9**	169± 10*	172± 10*	173± 11**
4000 ppm	150± 7**	152± 7**	157± 9**	159± 8**	164± 8**	167± 7**	169± 9**
10000 ppm	141± 8**	145± 7**	147± 7**	150± 7**	155± 9**	157± 8**	159± 8**

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

TABLE D 1

FOOD CONSUMPTION CHANGES AND

SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

Week on Study	Control Av. FC.	Control No. of Surviv. <10>	256 ppm Av. FC.	256 ppm % of cont. <10>	256 ppm No. of Surviv.	640 ppm Av. FC.	640 ppm % of cont. <10>	640 ppm No. of Surviv.	1600 ppm Av. FC.	1600 ppm % of cont. <10>	1600 ppm No. of Surviv.	4000 ppm Av. FC.	4000 ppm % of cont. <10>	4000 ppm No. of Surviv.	10000 ppm Av. FC.	10000 ppm % of cont. <10>	10000 ppm No. of Surviv.
1	13.2 (10)	10/10	13.2 (10)	100	10/10	13.2 (10)	100	10/10	12.7 (10)	96	10/10	11.4 (10)	86	10/10	9.1 (10)	69	10/10
2	14.0 (10)	10/10	14.5 (10)	104	10/10	14.4 (10)	103	10/10	13.7 (10)	98	10/10	12.9 (10)	92	10/10	11.5 (10)	82	10/10
3	14.9 (10)	10/10	15.3 (10)	103	10/10	15.1 (10)	101	10/10	14.6 (10)	98	10/10	13.9 (10)	93	10/10	12.0 (10)	81	10/10
4	15.1 (10)	10/10	15.2 (10)	101	10/10	15.1 (10)	100	10/10	14.6 (10)	97	10/10	14.2 (10)	94	10/10	11.9 (9)	79	10/10
5	15.2 (10)	10/10	15.6 (10)	103	10/10	15.4 (10)	101	10/10	14.8 (10)	97	10/10	14.6 (10)	96	10/10	12.2 (10)	80	10/10
6	15.1 (10)	10/10	15.6 (10)	103	10/10	15.3 (10)	101	10/10	14.4 (10)	95	10/10	14.5 (10)	96	10/10	12.2 (10)	81	10/10
7	15.3 (10)	10/10	15.9 (10)	104	10/10	15.5 (10)	101	10/10	14.8 (10)	97	10/10	14.3 (10)	93	10/10	12.2 (10)	80	10/10
8	15.2 (10)	10/10	15.8 (10)	104	10/10	15.3 (10)	101	10/10	14.6 (10)	96	10/10	14.3 (10)	94	10/10	12.1 (10)	80	10/10
9	15.3 (10)	10/10	15.8 (10)	103	10/10	15.5 (10)	101	10/10	14.8 (10)	97	10/10	14.1 (10)	92	10/10	12.2 (10)	80	10/10
10	15.4 (10)	10/10	15.7 (10)	102	10/10	15.5 (10)	101	10/10	14.6 (10)	95	10/10	14.3 (9)	93	10/10	12.4 (10)	81	10/10
11	15.4 (10)	10/10	15.6 (10)	101	10/10	15.5 (10)	101	10/10	14.7 (10)	95	10/10	14.3 (10)	93	10/10	12.3 (10)	80	10/10
12	15.3 (10)	10/10	15.4 (10)	101	10/10	15.4 (10)	101	10/10	14.5 (10)	95	10/10	14.3 (9)	93	10/10	12.5 (10)	82	10/10
13	15.1 (10)	10/10	15.2 (10)	101	10/10	15.3 (10)	101	10/10	14.4 (10)	95	10/10	14.3 (10)	95	10/10	12.2 (10)	81	10/10

< >:No. of effective animals, ( ):No. of measured animals Av. FC. : g

TABLE D 2

FOOD CONSUMPTION CHANGES AND

SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

Week on Study	Control Av. FC.	Control No. of Surviv. <10>	256 ppm Av. FC.	256 ppm % of cont. <10>	256 ppm No. of Surviv.	640 ppm Av. FC.	640 ppm % of cont. <10>	640 ppm No. of Surviv.	1600 ppm Av. FC.	1600 ppm % of cont. <10>	1600 ppm No. of Surviv.	4000 ppm Av. FC.	4000 ppm % of cont. <10>	4000 ppm No. of Surviv.	10000 ppm Av. FC.	10000 ppm % of cont. <10>	10000 ppm No. of Surviv.
1	10.3 (10)	10/10	10.2 (10)	99	10/10	10.3 (10)	100	10/10	9.6 (10)	93	10/10	9.1 (10)	88	10/10	7.5 (10)	73	10/10
2	10.5 (10)	10/10	10.4 (10)	99	10/10	10.5 (10)	100	10/10	10.2 (10)	97	10/10	9.8 (10)	93	10/10	8.8 (10)	84	10/10
3	10.8 (10)	10/10	10.5 (10)	97	10/10	10.6 (10)	98	10/10	10.2 (10)	94	10/10	9.6 (10)	89	10/10	8.5 (10)	79	10/10
4	11.0 (10)	10/10	10.5 (10)	95	10/10	10.6 (10)	96	10/10	10.2 (10)	93	10/10	9.4 (10)	85	10/10	8.1 (10)	74	10/10
5	11.1 (10)	10/10	10.6 (10)	95	10/10	10.5 (10)	95	10/10	10.4 (10)	94	10/10	9.5 (10)	86	10/10	8.3 (10)	75	10/10
6	10.9 (10)	10/10	10.6 (10)	97	10/10	10.4 (10)	95	10/10	9.8 (10)	90	10/10	9.3 (10)	85	10/10	8.2 (10)	75	10/10
7	11.2 (10)	10/10	10.6 (10)	95	10/10	10.3 (10)	92	10/10	10.0 (10)	89	10/10	9.5 (10)	85	10/10	8.2 (10)	73	10/10
8	10.9 (10)	10/10	10.1 (10)	93	10/10	10.2 (10)	94	10/10	9.6 (10)	88	10/10	9.3 (10)	85	10/10	8.1 (10)	74	10/10
9	10.7 (10)	10/10	10.1 (10)	94	10/10	10.2 (10)	95	10/10	9.6 (10)	90	10/10	9.3 (10)	87	10/10	8.2 (10)	77	10/10
10	10.2 (10)	10/10	10.0 (10)	98	10/10	10.0 (10)	98	10/10	9.6 (10)	94	10/10	9.0 (10)	88	10/10	8.2 (10)	80	10/10
11	10.4 (10)	10/10	10.0 (10)	96	10/10	10.1 (10)	97	10/10	9.8 (10)	94	10/10	9.1 (10)	88	10/10	8.1 (10)	78	10/10
12	10.4 (10)	10/10	9.8 (10)	94	10/10	10.2 (10)	98	10/10	9.7 (10)	93	10/10	9.2 (10)	88	10/10	8.1 (10)	78	10/10
13	10.3 (10)	10/10	9.9 (10)	96	10/10	10.0 (10)	97	10/10	9.6 (10)	93	10/10	9.3 (10)	90	10/10	8.3 (10)	81	10/10

< >:No. of effective animals, ( ):No. of measured animals Av. FC. : g

TABLE D 3

FOOD CONSUMPTION CHANGES: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 1	2	3	4	5	6	7
Control	13.2± 0.4	14.0± 0.7	14.9± 0.8	15.1± 0.8	15.2± 0.6	15.1± 0.6	15.3± 0.6
256 ppm	13.2± 0.7	14.5± 0.6	15.3± 0.6	15.2± 0.7	15.6± 0.6	15.6± 0.7	15.9± 0.8
640 ppm	13.2± 0.5	14.4± 0.8	15.1± 1.3	15.1± 1.2	15.4± 0.8	15.3± 0.5	15.5± 0.6
1600 ppm	12.7± 0.5	13.7± 0.5	14.6± 0.7	14.6± 0.6	14.8± 0.8	14.4± 0.7*	14.8± 0.8
4000 ppm	11.4± 0.5**	12.9± 0.7**	13.9± 0.7*	14.2± 0.8	14.6± 0.5	14.5± 0.7	14.3± 0.9*
10000 ppm	9.1± 0.4**	11.5± 0.4**	12.0± 0.6**	11.9± 0.7**	12.2± 0.7**	12.2± 0.7**	12.2± 0.5**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 8	9	10	11	12	13
Control	15.2± 0.7	15.3± 0.8	15.4± 0.8	15.4± 0.8	15.3± 0.9	15.1± 0.8
256 ppm	15.8± 1.0	15.8± 0.5	15.7± 0.7	15.6± 0.7	15.4± 0.6	15.2± 0.7
640 ppm	15.3± 0.9	15.5± 0.9	15.5± 0.7	15.5± 1.0	15.4± 1.1	15.3± 1.2
1600 ppm	14.6± 0.8	14.8± 0.9	14.6± 0.9	14.7± 1.0	14.5± 0.9	14.4± 0.9
4000 ppm	14.3± 0.8	14.1± 0.7**	14.3± 0.6**	14.3± 0.7*	14.3± 0.7*	14.3± 1.2
10000 ppm	12.1± 0.5**	12.2± 0.4**	12.4± 0.7**	12.3± 0.5**	12.5± 0.5**	12.2± 0.4**

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

TABLE D 4

FOOD CONSUMPTION CHANGES: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 1	2	3	4	5	6	7
Control	10.3± 0.5	10.5± 0.5	10.8± 0.8	11.0± 0.8	11.1± 0.9	10.9± 0.6	11.2± 0.9
256 ppm	10.2± 0.5	10.4± 0.4	10.5± 0.6	10.5± 0.7	10.6± 0.6	10.6± 0.7	10.6± 0.8
640 ppm	10.3± 0.6	10.5± 0.4	10.6± 0.5	10.6± 0.6	10.5± 0.4	10.4± 0.7	10.3± 0.7
1600 ppm	9.6± 0.4**	10.2± 0.3	10.2± 0.5	10.2± 0.6	10.4± 0.7	9.8± 0.8**	10.0± 0.7**
4000 ppm	9.1± 0.4**	9.8± 0.6**	9.6± 0.4**	9.4± 0.5**	9.5± 0.6**	9.3± 0.4**	9.5± 0.4**
10000 ppm	7.5± 0.4**	8.8± 0.3**	8.5± 0.7**	8.1± 0.8**	8.3± 0.7**	8.2± 0.8**	8.2± 0.7**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 8	9	10	11	12	13
Control	10.9± 1.0	10.7± 0.8	10.2± 0.7	10.4± 0.6	10.4± 0.6	10.3± 0.8
256 ppm	10.1± 0.8	10.1± 0.9	10.0± 0.8	10.0± 0.8	9.8± 0.6*	9.9± 0.6
640 ppm	10.2± 0.5	10.2± 0.5	10.0± 0.4	10.1± 0.4	10.2± 0.5	10.0± 0.5
1600 ppm	9.6± 0.7**	9.6± 0.8**	9.6± 0.5	9.8± 0.8	9.7± 0.6*	9.6± 0.6*
4000 ppm	9.3± 0.6**	9.3± 0.5**	9.0± 0.6**	9.1± 0.5**	9.2± 0.5**	9.3± 0.7**
10000 ppm	8.1± 0.6**	8.2± 0.7**	8.2± 0.6**	8.1± 0.7**	8.1± 0.5**	8.3± 0.6**

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

TABLE E 1

CHEMICAL INTAKE CHANGES: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : mg／kg／d a y
REPORT TYPE : A1 13
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks) 1		2		3		4		5		6		7	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
256 ppm	22±	1	20±	1	19±	1	17±	1	16±	0	15±	0	14±	1
640 ppm	56±	2	50±	1	45±	2	42±	2	39±	1	37±	2	36±	1
1600 ppm	136±	4	122±	3	113±	3	103±	3	96±	3	89±	2	87±	3
4000 ppm	319±	7	300±	8	280±	9	259±	9	245±	8	230±	9	218±	8
10000 ppm	695±	24	749±	16	682±	18	613±	21	585±	22	555±	27	530±	17

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : mg／kg／d a y
REPORT TYPE : A1 13
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks) 8		9		10		11		12		13	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
256 ppm	14±	1	13±	0	13±	1	12±	0	12±	0	12±	1
640 ppm	33±	1	32±	1	32±	1	31±	1	30±	1	29±	2
1600 ppm	83±	2	80±	2	77±	2	75±	2	73±	2	71±	2
4000 ppm	208±	7	197±	9	194±	8	188±	7	186±	10	182±	13
10000 ppm	511±	19	492±	14	486±	26	466±	19	466±	17	452±	15

TABLE E 2

CHEMICAL INTAKE CHANGES: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : mg／kg／d a y
REPORT TYPE : A1 13
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks) 1		2		3		4		5		6		7	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
256 ppm	23±	1	22±	1	20±	1	19±	1	18±	1	17±	1	17±	1
640 ppm	59±	2	54±	1	50±	1	47±	1	45±	2	43±	2	41±	2
1600 ppm	140±	3	132±	3	123±	5	117±	4	113±	5	103±	4	103±	5
4000 ppm	332±	11	323±	11	294±	7	274±	9	266±	12	254±	10	255±	9
10000 ppm	741±	38	786±	27	703±	30	634±	41	621±	32	590±	38	582±	28

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : mg／kg／d a y
REPORT TYPE : A1 13
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks) 8		9		10		11		12		13	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
256 ppm	16±	1	16±	1	15±	1	15±	1	14±	1	15±	1
640 ppm	40±	1	39±	1	37±	1	37±	1	37±	1	36±	1
1600 ppm	98±	5	95±	4	93±	3	93±	6	91±	4	89±	4
4000 ppm	245±	11	237±	9	227±	13	222±	11	222±	8	220±	12
10000 ppm	557±	26	556±	24	543±	26	524±	25	517±	14	519±	21

TABLE F 1

HEMATOLOGY: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV fℓ	MCH pg	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	10	9.18± 0.21	16.0± 0.3	42.7± 1.0	46.5± 0.5	17.5± 0.2	37.5± 0.1	765± 39
256 ppm	10	9.23± 0.18	16.1± 0.3	43.0± 0.8	46.5± 0.3	17.5± 0.2	37.5± 0.4	778± 33
640 ppm	10	9.12± 0.20	15.9± 0.4	42.4± 0.9	46.4± 0.3	17.5± 0.2	37.7± 0.3	793± 33
1600 ppm	10	9.06± 0.09	15.9± 0.2	42.2± 0.5	46.6± 0.4	17.6± 0.2	37.7± 0.4	797± 40
4000 ppm	10	9.15± 0.18	16.1± 0.4	42.7± 0.8	46.7± 0.4	17.6± 0.2	37.7± 0.6	780± 60
10000 ppm	10	9.12± 0.16	16.2± 0.3	43.0± 0.8	47.1± 0.4**	17.8± 0.2**	37.8± 0.2	805± 59

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	RETICULOCYTE %	METHEMOGLOBIN %
Control	10	1.6± 0.1	0.7± 0.1
256 ppm	10	1.7± 0.1	0.7± 0.2
640 ppm	10	1.7± 0.1	0.7± 0.1
1600 ppm	10	1.7± 0.2	0.6± 0.1
4000 ppm	10	1.6± 0.2	0.7± 0.1
10000 ppm	10	1.5± 0.3	0.8± 0.1

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$		Differential WBC (%) NEUTRO		LYMPHO		MONO		EOSINO		BASO		OTHER	
Control	10	6.33±	1.41	25±	6	71±	6	2±	0	1±	0	0±	0	1±	0
256 ppm	10	6.93±	1.14	21±	3	74±	3	2±	1	1±	1	0±	1	1±	0
640 ppm	10	6.32±	1.50	22±	4	72±	5	3±	1	1±	0	0±	1	1±	0
1600 ppm	10	6.57±	1.52	21±	2	74±	3	3±	1	1±	0	0±	0	1±	1
4000 ppm	10	6.31±	2.11	22±	4	74±	4	2±	0	1±	0	0±	0	1±	1
10000 ppm	10	5.85±	1.33	19±	3	77±	4	2±	0	1±	0	0±	0	1±	0

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

TABLE F 2

HEMATOLOGY: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	10	8.53± 0.25	16.0± 0.5	41.5± 1.2	48.6± 0.3	18.8± 0.2	38.5± 0.3	863± 66
256 ppm	10	8.63± 0.25	16.2± 0.5	42.0± 1.3	48.7± 0.4	18.8± 0.1	38.6± 0.3	827± 40
640 ppm	10	8.58± 0.14	16.1± 0.3	41.8± 0.7	48.8± 0.5	18.8± 0.1	38.5± 0.4	827± 87
1600 ppm	10	8.59± 0.27	16.2± 0.5	42.1± 1.2	49.1± 0.5	18.8± 0.1	38.4± 0.4	836± 66
4000 ppm	10	8.52± 0.23	16.0± 0.4	41.6± 1.0	48.8± 0.3	18.8± 0.2	38.6± 0.3	832± 53
10000 ppm	10	8.51± 0.27	16.0± 0.5	41.4± 1.4	48.7± 0.3	18.8± 0.1	38.6± 0.3	858± 33

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

Group Name	NO. of Animals	RETICULOCYTE %	METHEMOGLOBIN %
Control	10	1.5± 0.2	0.7± 0.1
256 ppm	10	1.4± 0.2	0.7± 0.1
640 ppm	10	1.4± 0.2	0.7± 0.1
1600 ppm	10	1.5± 0.2	0.7± 0.1
4000 ppm	10	1.6± 0.2	0.8± 0.1
10000 ppm	10	1.6± 0.2	0.8± 0.1

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$		Differential WBC (%) NEUTRO		LYMPHO		MONO		EOSINO		BASO		OTHER	
Control	10	3.52±	0.94	24±	4	71±	4	3±	1	2±	1	0±	0	1±	0
256 ppm	10	3.92±	1.21	22±	4	73±	3	2±	1	1±	0	0±	0	1±	0
640 ppm	10	3.07±	1.02	23±	4	72±	5	2±	1	2±	1	0±	0	1±	1
1600 ppm	10	2.97±	1.13	21±	5	74±	6	3±	1	2±	1	0±	0	1±	0
4000 ppm	10	3.16±	1.41	26±	5	69±	5	2±	1	1±	0	0±	0	1±	0
10000 ppm	10	3.86±	1.42	21±	6	76±	6	2±	1	1±	0	0±	0	1±	0

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

TABLE G 1

BIOCHEMISTRY: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dl	ALBUMIN g/dl	A/G RATIO	T-BILIRUBIN mg/dl	GLUCOSE mg/dl	T-CHOLESTEROL mg/dl	TRIGLYCERIDE mg/dl
Control	10	6.6± 0.2	3.5± 0.1	1.1± 0.1	0.10± 0.01	177± 8	64± 6	53± 19
256 ppm	10	6.7± 0.1	3.6± 0.1	1.1± 0.1	0.11± 0.01	183± 6	67± 5	58± 19
640 ppm	10	6.7± 0.2	3.5± 0.1	1.1± 0.1	0.10± 0.01	181± 10	68± 4	51± 18
1600 ppm	10	6.7± 0.1	3.5± 0.0	1.1± 0.1	0.10± 0.01	183± 8	72± 8**	51± 17
4000 ppm	10	6.7± 0.1	3.6± 0.1	1.2± 0.1	0.10± 0.00	187± 15	71± 4*	37± 14
10000 ppm	10	6.7± 0.2	3.7± 0.1**	1.2± 0.1**	0.11± 0.01	178± 9	82± 5**	29± 10**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl	AST IU/l	ALT IU/l	LDH IU/l	ALP IU/l	G-GTP IU/l	CK IU/l
Control	10	113± 7	81± 16	43± 6	92± 35	386± 27	1± 0	95± 18
256 ppm	10	119± 8	94± 21	47± 6	104± 31	380± 28	1± 1	91± 11
640 ppm	10	118± 7	80± 14	43± 5	103± 36	394± 26	1± 0	96± 17
1600 ppm	10	125± 13**	80± 11	41± 3	99± 27	372± 25	1± 0	92± 14
4000 ppm	10	124± 5*	77± 18	38± 6	112± 31	383± 34	1± 1	97± 10
10000 ppm	10	140± 8**	69± 11	36± 5*	104± 28	362± 32	2± 0	92± 12

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	UREA NITROGEN mg/dℓ	CREATININE mg/dℓ	SODIUM mEq/ℓ	POTASSIUM mEq/ℓ	CHLORIDE mEq/ℓ	CALCIUM mg/dℓ	INORGANIC PHOSPHORUS mg/dℓ
Control	10	19.0± 1.1	0.6± 0.1	141± 1	3.4± 0.2	104± 2	10.4± 0.3	5.7± 0.6
256 ppm	10	19.0± 1.3	0.5± 0.0	141± 1	3.3± 0.2	104± 1	10.4± 0.3	5.7± 0.6
640 ppm	10	19.3± 1.6	0.6± 0.1	141± 1	3.3± 0.2	103± 1	10.5± 0.1	5.5± 0.5
1600 ppm	10	19.2± 1.7	0.6± 0.1	140± 1	3.4± 0.3	103± 1	10.5± 0.2	5.7± 0.6
4000 ppm	10	21.2± 1.6*	0.6± 0.1	140± 1	3.4± 0.2	103± 1	10.4± 0.2	5.5± 0.7
10000 ppm	10	21.3± 1.9**	0.5± 0.0	140± 1	3.5± 0.2	103± 1	10.4± 0.1	5.6± 0.4

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

TABLE G 2

BIOCHEMISTRY: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dl	ALBUMIN g/dl	A/G RATIO	T-BILIRUBIN mg/dl	GLUCOSE mg/dl	T-CHOLESTEROL mg/dl	TRIGLYCERIDE mg/dl
Control	10	6.5± 0.2	3.5± 0.1	1.2± 0.1	0.11± 0.01	141± 20	75± 6	11± 5
256 ppm	10	6.5± 0.3	3.5± 0.1	1.2± 0.1	0.12± 0.01	144± 19	76± 8	11± 2
640 ppm	10	6.5± 0.2	3.6± 0.1	1.2± 0.1	0.11± 0.01	142± 14	76± 6	13± 3
1600 ppm	10	6.5± 0.2	3.6± 0.1	1.2± 0.1	0.11± 0.01	142± 16	74± 5	11± 4
4000 ppm	10	6.4± 0.1	3.5± 0.1	1.2± 0.1	0.11± 0.01	148± 11	75± 4	12± 4
10000 ppm	10	6.3± 0.2*	3.4± 0.1	1.2± 0.0	0.11± 0.01	155± 12	82± 6	14± 4

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dℓ		AST IU/ℓ		ALT IU/ℓ		LDH IU/ℓ		ALP IU/ℓ		G-GTP IU/ℓ		CK IU/ℓ	
Control	10	138±	10	76±	12	40±	14	103±	36	296±	27	2±	1	100±	19
256 ppm	10	141±	12	75±	12	36±	6	105±	48	286±	24	1±	1	105±	31
640 ppm	10	140±	10	76±	13	39±	8	90±	29	268±	37	2±	0	93±	16
1600 ppm	10	135±	10	73±	11	36±	8	95±	39	294±	23	2±	1	98±	21
4000 ppm	10	138±	8	73±	7	32±	4	93±	23	304±	34	2±	1	89±	13
10000 ppm	10	145±	10	67±	5	36±	5	87±	18	376±	61**	5±	1**	84±	12

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (14W)

Group Name	NO. of Animals	UREA NITROGEN mg/dl	CREATININE mg/dl	SODIUM mEq/l	POTASSIUM mEq/l	CHLORIDE mEq/l	CALCIUM mg/dl	INORGANIC PHOSPHORUS mg/dl
Control	10	17.7± 1.1	0.6± 0.0	142± 1	3.1± 0.3	106± 2	10.1± 0.2	4.9± 1.2
256 ppm	10	17.7± 1.5	0.6± 0.1	141± 1	3.1± 0.2	105± 1	10.1± 0.1	5.0± 1.2
640 ppm	10	17.8± 2.0	0.6± 0.0	141± 1	3.2± 0.4	105± 2	10.0± 0.2	4.8± 1.3
1600 ppm	10	18.1± 1.4	0.6± 0.1	142± 1	3.1± 0.3	106± 2	10.0± 0.2	4.8± 1.1
4000 ppm	10	19.8± 1.7*	0.6± 0.1	141± 1	3.2± 0.2	106± 2	9.9± 0.1	4.9± 1.1
10000 ppm	10	22.0± 2.5**	0.5± 0.0	141± 1	3.6± 0.2**	106± 1	9.9± 0.2	5.5± 0.8

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

TABLE H 1

URINALYSIS: MALE

STUDY NO. : 0719 URINALYSIS
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Bilirubin −	+	2+	3+	CHI
Control	10	0	0	0	0	0	4	6		0	0	0	8	2	0		10	0	0	0	0	0		3	3	4	0	0	0		10	0	0	0	
256 ppm	10	0	0	0	0	0	4	6		0	0	1	8	1	0		10	0	0	0	0	0		4	2	4	0	0	0		10	0	0	0	
640 ppm	10	0	0	0	0	0	2	8		0	0	2	7	1	0		10	0	0	0	0	0		3	2	5	0	0	0		10	0	0	0	
1600 ppm	10	0	0	0	0	0	4	6		0	0	2	7	1	0		10	0	0	0	0	0		4	2	4	0	0	0		10	0	0	0	
4000 ppm	10	0	0	0	0	0	5	5		0	0	4	3	3	0	*	10	0	0	0	0	0		3	2	5	0	0	0		10	0	0	0	
10000 ppm	10	0	0	0	1	6	3	0	**	0	0	3	7	0	0		10	0	0	0	0	0		6	2	2	0	0	0		10	0	0	0	

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

STUDY NO. : 0719 URINALYSIS
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

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	
256 ppm	10	10	0	0	0	0		10	0	0	0	0	
640 ppm	10	10	0	0	0	0		10	0	0	0	0	
1600 ppm	10	10	0	0	0	0		10	0	0	0	0	
4000 ppm	10	10	0	0	0	0		10	0	0	0	0	
10000 ppm	10	10	0	0	0	0		10	0	0	0	0	

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

TABLE H 2

URINALYSIS: FEMALE

STUDY NO. : 0719 URINALYSIS
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Bilirubin −	+	2+	3+	CHI
Control	10	0	0	0	1	0	6	3		0	2	6	2	0	0		10	0	0	0	0	0		5	5	0	0	0	0		10	0	0	0	
256 ppm	10	0	0	0	0	0	7	3		0	1	6	3	0	0		10	0	0	0	0	0		5	5	0	0	0	0		10	0	0	0	
640 ppm	10	0	0	0	0	1	8	1		0	2	7	1	0	0		10	0	0	0	0	0		3	7	0	0	0	0		10	0	0	0	
1600 ppm	10	0	0	0	0	1	6	3		0	1	9	0	0	0		10	0	0	0	0	0		4	6	0	0	0	0		10	0	0	0	
4000 ppm	10	0	0	1	0	0	5	4		0	2	8	0	0	0		10	0	0	0	0	0		1	9	0	0	0	0		10	0	0	0	
10000 ppm	10	0	0	0	2	3	5	0		0	0	4	6	0	0		10	0	0	0	0	0		0	10	0	0	0	0	**	10	0	0	0	

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

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	
256 ppm	10	10	0	0	0	0		10	0	0	0	0	
640 ppm	10	10	0	0	0	0		10	0	0	0	0	
1600 ppm	10	10	0	0	0	0		10	0	0	0	0	
4000 ppm	10	10	0	0	0	0		10	0	0	0	0	
10000 ppm	10	10	0	0	0	0		10	0	0	0	0	

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

TABLE I 1

GROSS FINDINGS: MALE: ALL ANIMALS

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0- 14W)

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	256 ppm 10 (%)	640 ppm 10 (%)	1600 ppm 10 (%)
thymus	red zone		0 (0)	0 (0)	0 (0)	1 (10)
forestomach	thick		0 (0)	0 (0)	0 (0)	0 (0)
liver	herniation		1 (10)	1 (10)	0 (0)	1 (10)

Organ	Findings	Group Name NO. of Animals	4000 ppm 10 (%)	10000 ppm 10 (%)
thymus	red zone		0 (0)	0 (0)
forestomach	thick		0 (0)	9 (90)
liver	herniation		0 (0)	1 (10)

TABLE I 2

GROSS FINDINGS: FEMALE: ALL ANIMALS

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	256 ppm 10 (%)	640 ppm 10 (%)	1600 ppm 10 (%)
forestomach	thick		0 (0)	0 (0)	0 (0)	0 (0)
liver	herniation		3 (30)	2 (20)	1 (10)	0 (0)
ovary	cyst		0 (0)	0 (0)	0 (0)	0 (0)

Organ	Findings	Group Name NO. of Animals	4000 ppm 10 (%)	10000 ppm 10 (%)
forestomach	thick		0 (0)	10 (100)
liver	herniation		0 (0)	0 (0)
ovary	cyst		0 (0)	1 (10)

TABLE J 1

ORGAN WEIGHT, ABSOLUTE: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	313± 13	0.222± 0.020	0.049± 0.005	3.198± 0.075	0.964± 0.106	0.997± 0.049
256 ppm	10	317± 14	0.251± 0.036	0.048± 0.003	3.165± 0.283	0.986± 0.032	1.003± 0.031
640 ppm	10	318± 16	0.256± 0.031*	0.052± 0.008	3.230± 0.080	0.960± 0.056	1.025± 0.038
1600 ppm	10	304± 12	0.242± 0.022	0.049± 0.005	3.258± 0.091	0.950± 0.056	0.976± 0.049
4000 ppm	10	293± 11**	0.210± 0.018	0.047± 0.003	3.293± 0.058	0.931± 0.062	0.982± 0.045
10000 ppm	10	253± 11**	0.178± 0.016**	0.042± 0.003**	3.198± 0.073	0.780± 0.029**	0.867± 0.044**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	1.893± 0.093	0.602± 0.033	7.428± 0.443	1.901± 0.051
256 ppm	10	1.965± 0.111	0.607± 0.024	7.808± 0.375	1.934± 0.040
640 ppm	10	2.003± 0.083	0.617± 0.031	7.833± 0.419	1.937± 0.048
1600 ppm	10	1.934± 0.085	0.582± 0.032	7.609± 0.476	1.928± 0.054
4000 ppm	10	1.948± 0.123	0.565± 0.028*	7.613± 0.569	1.917± 0.033
10000 ppm	10	1.729± 0.082**	0.503± 0.022**	6.850± 0.370*	1.866± 0.048

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

TABLE J 2

ORGAN WEIGHT, ABSOLUTE: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	10	172± 10	0.212± 0.028	0.054± 0.005	0.106± 0.016	0.616± 0.036	0.731± 0.043
256 ppm	10	164± 8	0.182± 0.029*	0.054± 0.006	0.105± 0.016	0.614± 0.025	0.687± 0.039
640 ppm	10	167± 6	0.182± 0.022*	0.054± 0.006	0.108± 0.014	0.626± 0.037	0.708± 0.036
1600 ppm	10	160± 10*	0.179± 0.019**	0.050± 0.005	0.108± 0.019	0.601± 0.037	0.688± 0.044
4000 ppm	10	154± 7**	0.174± 0.018**	0.050± 0.006	0.104± 0.010	0.582± 0.029	0.677± 0.029*
10000 ppm	10	148± 8**	0.173± 0.020**	0.045± 0.004**	0.089± 0.021	0.546± 0.044**	0.641± 0.038**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	1.144± 0.052	0.402± 0.027	4.028± 0.240	1.762± 0.025
256 ppm	10	1.138± 0.037	0.370± 0.016*	3.847± 0.220	1.757± 0.043
640 ppm	10	1.133± 0.039	0.375± 0.015	3.916± 0.113	1.774± 0.037
1600 ppm	10	1.095± 0.054	0.368± 0.026**	3.786± 0.262	1.750± 0.047
4000 ppm	10	1.103± 0.053	0.351± 0.020**	3.794± 0.236	1.755± 0.044
10000 ppm	10	1.069± 0.050**	0.344± 0.034**	3.871± 0.222	1.726± 0.039

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

TABLE K 1

ORGAN WEIGHT, RELATIVE: MALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	TESTES	HEART	LUNGS
Control	10	313± 13	0.071± 0.007	0.016± 0.002	1.024± 0.044	0.308± 0.024	0.319± 0.012
256 ppm	10	317± 14	0.079± 0.011	0.015± 0.000	1.001± 0.106	0.311± 0.011	0.317± 0.010
640 ppm	10	318± 16	0.080± 0.009*	0.016± 0.003	1.018± 0.052	0.302± 0.014	0.323± 0.013
1600 ppm	10	304± 12	0.080± 0.008	0.016± 0.002	1.072± 0.045	0.312± 0.016	0.321± 0.017
4000 ppm	10	293± 11**	0.072± 0.006	0.016± 0.001	1.123± 0.034**	0.317± 0.016	0.335± 0.012*
10000 ppm	10	253± 11**	0.070± 0.005	0.017± 0.001	1.265± 0.050**	0.309± 0.016	0.343± 0.014**

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.605± 0.019	0.193± 0.005	2.375± 0.090	0.608± 0.022
256 ppm	10	0.620± 0.024	0.192± 0.005	2.463± 0.063	0.611± 0.036
640 ppm	10	0.630± 0.014*	0.194± 0.008	2.464± 0.082	0.610± 0.033
1600 ppm	10	0.636± 0.024**	0.191± 0.008	2.498± 0.071**	0.634± 0.031
4000 ppm	10	0.664± 0.028**	0.193± 0.008	2.592± 0.112**	0.654± 0.017**
10000 ppm	10	0.683± 0.013**	0.199± 0.007	2.706± 0.076**	0.738± 0.025**

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

TABLE K 2

ORGAN WEIGHT, RELATIVE: FEMALE

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	THYMUS	ADRENALS	OVARIES	HEART	LUNGS
Control	10	172± 10	0.123± 0.012	0.032± 0.003	0.062± 0.009	0.359± 0.020	0.425± 0.025
256 ppm	10	164± 8	0.111± 0.015	0.033± 0.004	0.064± 0.009	0.375± 0.015	0.420± 0.013
640 ppm	10	167± 6	0.109± 0.010	0.032± 0.004	0.065± 0.008	0.375± 0.014	0.424± 0.015
1600 ppm	10	160± 10*	0.111± 0.008	0.031± 0.003	0.068± 0.012	0.375± 0.023	0.430± 0.031
4000 ppm	10	154± 7**	0.113± 0.010	0.032± 0.003	0.068± 0.007	0.378± 0.015	0.440± 0.020
10000 ppm	10	148± 8**	0.117± 0.010	0.030± 0.003	0.060± 0.012	0.370± 0.021	0.435± 0.017

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

STUDY NO. : 0719
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.667± 0.032	0.234± 0.013	2.343± 0.067	1.028± 0.062
256 ppm	10	0.695± 0.031	0.226± 0.011	2.347± 0.066	1.074± 0.046
640 ppm	10	0.679± 0.021	0.225± 0.008	2.347± 0.046	1.064± 0.034
1600 ppm	10	0.684± 0.034	0.230± 0.011	2.362± 0.072	1.095± 0.066*
4000 ppm	10	0.717± 0.019**	0.228± 0.010	2.465± 0.081**	1.142± 0.035**
10000 ppm	10	0.726± 0.028**	0.233± 0.017	2.626± 0.101**	1.173± 0.055**

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

TABLE L 1

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:MALE: ALL ANIMALS

Organ	Findings	Group Name	Control				256 ppm				640 ppm				1600 ppm			
		No. of Animals on Study	10				10				10				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
thymus			<10>				<10>				<10>				<10>			
	atrophy		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	congestion		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)	(10)	(0)	(0)	(0)
{Circulatory system}																		
heart			<10>				<10>				<10>				<10>			
	inflammatory cell nest		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(10)	(0)	(0)
{Digestive system}																		
stomach			<10>				<10>				<10>				<10>			
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)
liver			<10>				<10>				<10>				<10>			
	herniation		1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(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
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	4000 ppm				10000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}										
thymus			<10>				<10>			
	atrophy		0	0	0	0	10	0	0	0 **
			(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	congestion		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}										
heart			<10>				<10>			
	inflammatory cell nest		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}										
stomach			<10>				<10>			
	hyperplasia:forestomach		9	0	0	0 **	3	7	0	0 **
			(90)	(0)	(0)	(0)	(30)	(70)	(0)	(0)
liver			<10>				<10>			
	herniation		0	0	0	0	1	0	0	0
			(0)	(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
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 10 1 (%)	Control 10 2 (%)	Control 10 3 (%)	Control 10 4 (%)	256 ppm 10 1 (%)	256 ppm 10 2 (%)	256 ppm 10 3 (%)	256 ppm 10 4 (%)	640 ppm 10 1 (%)	640 ppm 10 2 (%)	640 ppm 10 3 (%)	640 ppm 10 4 (%)	1600 ppm 10 1 (%)	1600 ppm 10 2 (%)	1600 ppm 10 3 (%)	1600 ppm 10 4 (%)
{Urinary system}																		
kidney		<10>																
	eosinophilic body		10 (100)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 (0)	9 (90)	1 (10)	0 (0)	0 (0)
	mineralization:papilla		1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	regeneration:proximal tubule		0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Endocrine system}																		
pituitary		<10>																
	Rathke pouch		0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thyroid		<10>																
	ultimobranchial body remanet		0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
testis		<10>																
	atrophy		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	4000 ppm				10000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}										
kidney			<10>				<10>			
	eosinophilic body		10	0	0	0	10	0	0	0
			(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	mineralization:papilla		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	regeneration:proximal tubule		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
{Endocrine system}										
pituitary			<10>				<10>			
	Rathke pouch		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<10>				<10>			
	ultimobranchial body remanet		1	0	0	0	2	0	0	0
			(10)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
{Reproductive system}										
testis			<10>				<10>			
	atrophy		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				256 ppm				640 ppm				1600 ppm			
		No. of Animals on Study	10				10				10				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			<10>				<10>				<10>				<10>			
	lymphocytic infiltration		1	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(20)	(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
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	4000 ppm				10000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}										
Harder gl			<10>				<10>			
	lymphocytic infiltration		1	0	0	0	1	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
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

TABLE L 2

HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: FEMALE: ALL ANIMALS

Organ	Findings	Group Name	Control				256 ppm				640 ppm				1600 ppm			
		No. of Animals on Study	10				10				10				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<10>				<10>				<10>				<10>			
	inflammatory infiltration		3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<10>				<10>				<10>				<10>			
	granulation		2	3	0	0	3	0	0	0	2	1	0	0	1	0	0	0
			(20)	(30)	(0)	(0)	(30)	(0)	(0)	(0)	(20)	(10)	(0)	(0)	(10)	(0)	(0)	(0)
thymus			<10>				<10>				<10>				<10>			
	atrophy		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
stomach			<10>				<10>				<10>				<10>			
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)
liver			<10>				<10>				<10>				<10>			
	herniation		3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(30)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	4000 ppm				10000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}										
nasal cavit			<10>				<10>			
	inflammatory infiltration		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}										
bone marrow			<10>				<10>			
	granulation		0	0	0	0 *	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)
thymus			<10>				<10>			
	atrophy		0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
{Digestive system}										
stomach			<10>				<10>			
	hyperplasia:forestomach		7	1	0	0 **	5	5	0	0 **
			(70)	(10)	(0)	(0)	(50)	(50)	(0)	(0)
liver			<10>				<10>			
	herniation		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				256 ppm				640 ppm				1600 ppm			
		No. of Animals on Study	10				10				10				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<10>				<10>				<10>				<10>			
	mineralization:cortico-medullary junction		8	0	0	0	5	0	0	0	5	0	0	0	7	0	0	0
			(80)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(70)	(0)	(0)	(0)
	mineralization:papilla		2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:cortex		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<10>				<10>				<10>				<10>			
	Rathke pouch		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<10>				<10>				<10>				<10>			
	ultimobranchial body remanet		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
Harder gl			<10>				<10>				<10>				<10>			
	lymphocytic infiltration		6	0	0	0	0	1	0	0 *	4	0	0	0	1	0	0	0
			(60)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(40)	(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
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	4000 ppm				10000 ppm			
		No. of Animals on Study	10				10			
		Grade	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}										
kidney			<10>				<10>			
	mineralization:cortico-medullary junction		8	0	0	0	8	0	0	0
			(80)	(0)	(0)	(0)	(80)	(0)	(0)	(0)
	mineralization:papilla		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	mineralization:cortex		0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}										
pituitary			<10>				<10>			
	Rathke pouch		1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<10>				<10>			
	ultimobranchial body remanet		0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
{Special sense organs/appendage}										
Harder gl			<10>				<10>			
	lymphocytic infiltration		0	0	0	0 *	4	0	0	0
			(0)	(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
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square