

酸化チタン（ナノ粒子、アナターゼ型）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：0863

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TABLE A

CONCENTRATIONS OF TITANIUM DIOXIDE
IN THE INHALATION CHAMBER
OF THE 13-WEEK INHALATION STUDY

CONCENTRATIONS OF TITANIUM DIOXIDE IN THE
INHALATION CHAMBER OF THE 13-WEEK INHALATION STUDY

Group Name	Concentration(mg/m ³) Mean ± S.D.
Control	0.00 ± 0.00
6.3 mg/m ³	6.37 ± 0.29
12.5 mg/m ³	12.69 ± 0.87
25 mg/m ³	25.04 ± 1.56
50 mg/m ³	49.89 ± 2.88

TABLE B1

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCrI CrIj[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	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
6.3 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
12.5 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
25 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
50 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
		Number of survival/ Number of effective animals Survival rate(%)													

TABLE B2

SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0863

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCrI CrIj[F344/DuCrj]

REPORT TYPE : A1 13

SEX : FEMALE

Group Name	Animals At start	Administration (Weeks)													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
6.3 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
12.5 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
25 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
50 mg/m3	10	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0	10/10 100.0
		Number of survival/ Number of effective animals Survival rate(%)													

TABLE C1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 13

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 1

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
	6.3 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10
	12.5 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10
	25 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10
	50 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10

(HAN190)

BAIS 5

TABLE C2

CLINICAL OBSERVATION : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 13

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 2

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
	6.3 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10
	12.5 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10
	25 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10
	50 mg/m3	10	10	10	10	10	10	10	10	10	10	10	10	10

(HAN190)

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TABLE D1

BODY WEIGHT CHANGES AND
SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

Week-Day on Study	Control		6.3 mg/m3			12.5 mg/m3			25 mg/m3			50 mg/m3		
	Av. Wt.	No. of Surviv. <10>	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.
0-0	119 (10)	10/10	119 (10)	100	10/10	118 (10)	99	10/10	119 (10)	100	10/10	119 (10)	100	10/10
1-7	145 (10)	10/10	142 (10)	98	10/10	144 (10)	99	10/10	144 (10)	99	10/10	142 (10)	98	10/10
2-7	172 (10)	10/10	171 (10)	99	10/10	171 (10)	99	10/10	169 (10)	98	10/10	167 (10)	97	10/10
3-7	195 (10)	10/10	194 (10)	99	10/10	194 (10)	99	10/10	195 (10)	100	10/10	191 (10)	98	10/10
4-7	213 (10)	10/10	211 (10)	99	10/10	214 (10)	100	10/10	214 (10)	100	10/10	212 (10)	100	10/10
5-7	228 (10)	10/10	226 (10)	99	10/10	230 (10)	101	10/10	228 (10)	100	10/10	228 (10)	100	10/10
6-7	239 (10)	10/10	239 (10)	100	10/10	242 (10)	101	10/10	244 (10)	102	10/10	242 (10)	101	10/10
7-7	250 (10)	10/10	250 (10)	100	10/10	256 (10)	102	10/10	255 (10)	102	10/10	253 (10)	101	10/10
8-7	260 (10)	10/10	260 (10)	100	10/10	268 (10)	103	10/10	266 (10)	102	10/10	265 (10)	102	10/10
9-7	271 (10)	10/10	269 (10)	99	10/10	277 (10)	102	10/10	276 (10)	102	10/10	274 (10)	101	10/10
10-7	275 (10)	10/10	277 (10)	101	10/10	285 (10)	104	10/10	284 (10)	103	10/10	283 (10)	103	10/10
11-7	283 (10)	10/10	283 (10)	100	10/10	290 (10)	102	10/10	290 (10)	102	10/10	291 (10)	103	10/10
12-7	287 (10)	10/10	291 (10)	101	10/10	298 (10)	104	10/10	297 (10)	103	10/10	298 (10)	104	10/10
13-7	294 (10)	10/10	297 (10)	101	10/10	305 (10)	104	10/10	305 (10)	104	10/10	305 (10)	104	10/10

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

TABLE D2

BODY WEIGHT CHANGES AND
SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 13
SEX : FEMALE

MEAN BODY WEIGHTS AND SURVIVAL

Week-Day on Study	Control		6.3 mg/m3			12.5 mg/m3			25 mg/m3			50 mg/m3		
	Av. Wt.	No. of Surviv. <10>	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.	Av. Wt.	% of cont. <10>	No. of Surviv.
0-0	97 (10)	10/10	98 (10)	101	10/10	97 (10)	100	10/10	98 (10)	101	10/10	98 (10)	101	10/10
1-7	112 (10)	10/10	111 (10)	99	10/10	111 (10)	99	10/10	110 (10)	98	10/10	109 (10)	97	10/10
2-7	125 (10)	10/10	122 (10)	98	10/10	124 (10)	99	10/10	121 (10)	97	10/10	119 (10)	95	10/10
3-7	132 (10)	10/10	131 (10)	99	10/10	133 (10)	101	10/10	132 (10)	100	10/10	131 (10)	99	10/10
4-7	141 (10)	10/10	138 (10)	98	10/10	141 (10)	100	10/10	140 (10)	99	10/10	138 (10)	98	10/10
5-7	147 (10)	10/10	145 (10)	99	10/10	147 (10)	100	10/10	147 (10)	100	10/10	143 (10)	97	10/10
6-7	152 (10)	10/10	150 (10)	99	10/10	152 (10)	100	10/10	153 (10)	101	10/10	149 (10)	98	10/10
7-7	154 (10)	10/10	154 (10)	100	10/10	156 (10)	101	10/10	156 (10)	101	10/10	153 (10)	99	10/10
8-7	158 (10)	10/10	158 (10)	100	10/10	161 (10)	102	10/10	160 (10)	101	10/10	157 (10)	99	10/10
9-7	161 (10)	10/10	161 (10)	100	10/10	164 (10)	102	10/10	164 (10)	102	10/10	159 (10)	99	10/10
10-7	166 (10)	10/10	165 (10)	99	10/10	167 (10)	101	10/10	167 (10)	101	10/10	162 (10)	98	10/10
11-7	167 (10)	10/10	168 (10)	101	10/10	171 (10)	102	10/10	170 (10)	102	10/10	165 (10)	99	10/10
12-7	171 (10)	10/10	171 (10)	100	10/10	173 (10)	101	10/10	174 (10)	102	10/10	167 (10)	98	10/10
13-7	172 (10)	10/10	173 (10)	101	10/10	177 (10)	103	10/10	174 (10)	101	10/10	171 (10)	99	10/10

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

TABLE D3

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	119± 4	145± 5	172± 7	195± 8	213± 12	228± 12	239± 14
6.3 mg/m3	119± 4	142± 5	171± 7	194± 9	211± 12	226± 13	239± 15
12.5 mg/m3	118± 4	144± 7	171± 10	194± 12	214± 13	230± 11	242± 12
25 mg/m3	119± 4	144± 5	169± 5	195± 6	214± 6	228± 6	244± 8
50 mg/m3	119± 3	142± 7	167± 8	191± 9	212± 10	228± 11	242± 12

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Control	250±	15	260±	17	271±	18	275±	17	283±	18	287±	18	294±	21		
6.3 mg/m3	250±	15	260±	17	269±	18	277±	19	283±	19	291±	21	297±	20		
12.5 mg/m3	256±	14	268±	13	277±	13	285±	14	290±	13	298±	13	305±	13		
25 mg/m3	255±	9	266±	11	276±	10	284±	11	290±	12	297±	14	305±	14		
50 mg/m3	253±	12	265±	12	274±	11	283±	13	291±	14	298±	14	305±	15		

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

Test of Dunnett

TABLE D4

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	112± 3	125± 5	132± 4	141± 5	147± 6	152± 7
6.3 mg/m3	98± 3	111± 3	122± 4	131± 4	138± 5	145± 5	150± 6
12.5 mg/m3	97± 3	111± 4	124± 3	133± 4	141± 5	147± 5	152± 6
25 mg/m3	98± 3	110± 5	121± 5	132± 6	140± 7	147± 7	153± 7
50 mg/m3	98± 3	109± 4	119± 4*	131± 5	138± 5	143± 5	149± 5

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Control	154±	6	158±	7	161±	7	166±	8	167±	8	171±	8	172±	7		
6.3 mg/m3	154±	8	158±	8	161±	9	165±	9	168±	10	171±	10	173±	9		
12.5 mg/m3	156±	6	161±	7	164±	8	167±	8	171±	8	173±	7	177±	8		
25 mg/m3	156±	8	160±	9	164±	10	167±	10	170±	11	174±	12	174±	12		
50 mg/m3	153±	7	157±	7	159±	7	162±	5	165±	5	167±	5	171±	6		

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

Test of Dunnett

TABLE E1

FOOD CONSUMPTION CHANGES AND
SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : MALE

MEAN FOOD CONSUMPTION (FC) AND SURVIVAL

Week-Day on Study	Control		6.3 mg/m3			12.5 mg/m3			25 mg/m3			50 mg/m3		
	Av. FC.	No. of Surviv. <10>	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.
1-7	15.5 (10)	10/10	15.6 (10)	101	10/10	15.8 (10)	102	10/10	15.9 (10)	103	10/10	16.0 (10)	103	10/10
2-7	16.0 (10)	10/10	15.9 (10)	99	10/10	16.1 (10)	101	10/10	16.1 (10)	101	10/10	16.3 (10)	102	10/10
3-7	16.7 (10)	10/10	16.6 (10)	99	10/10	16.7 (10)	100	10/10	16.7 (10)	100	10/10	16.2 (10)	97	10/10
4-7	16.8 (10)	10/10	17.2 (10)	102	10/10	17.2 (10)	102	10/10	16.8 (10)	100	10/10	17.0 (10)	101	10/10
5-7	16.6 (10)	10/10	16.6 (10)	100	10/10	16.8 (10)	101	10/10	16.8 (10)	101	10/10	16.9 (10)	102	10/10
6-7	16.2 (10)	10/10	16.0 (10)	99	10/10	16.4 (10)	101	10/10	16.6 (10)	102	10/10	16.6 (10)	102	10/10
7-7	15.4 (10)	10/10	15.8 (10)	103	10/10	16.5 (10)	107	10/10	16.1 (10)	105	10/10	16.3 (10)	106	10/10
8-7	15.7 (10)	10/10	16.1 (10)	103	10/10	16.4 (10)	104	10/10	16.6 (10)	106	10/10	16.1 (10)	103	10/10
9-7	16.1 (10)	10/10	15.8 (10)	98	10/10	16.4 (10)	102	10/10	16.5 (10)	102	10/10	16.1 (10)	100	10/10
10-7	15.8 (10)	10/10	15.8 (10)	100	10/10	16.4 (10)	104	10/10	16.8 (10)	106	10/10	16.4 (10)	104	10/10
11-7	15.6 (10)	10/10	15.9 (10)	102	10/10	16.5 (10)	106	10/10	16.4 (10)	105	10/10	16.4 (10)	105	10/10
12-7	15.7 (10)	10/10	16.3 (10)	104	10/10	16.6 (10)	106	10/10	17.0 (10)	108	10/10	16.6 (10)	106	10/10
13-7	15.8 (10)	10/10	16.0 (10)	101	10/10	16.3 (10)	103	10/10	17.0 (10)	108	10/10	16.5 (10)	104	10/10

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

TABLE E2

**FOOD CONSUMPTION CHANGES AND
SURVIVAL ANIMAL NUMBERS : FEMALE**

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 13
 SEX : FEMALE

MEAN FOOD CONSUMPTION (FC) AND SURVIVAL

Week-Day on Study	Control		6.3 mg/m3			12.5 mg/m3			25 mg/m3			50 mg/m3		
	Av. FC.	No. of Surviv. <10>	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.	Av. FC.	% of cont. <10>	No. of Surviv.
1-7	12.3 (10)	10/10	12.6 (10)	102	10/10	12.3 (10)	100	10/10	12.3 (10)	100	10/10	12.6 (10)	102	10/10
2-7	12.7 (10)	10/10	12.0 (10)	94	10/10	11.7 (10)	92	10/10	11.9 (10)	94	10/10	11.9 (10)	94	10/10
3-7	12.2 (10)	10/10	11.9 (10)	98	10/10	11.9 (10)	98	10/10	11.8 (10)	97	10/10	11.7 (10)	96	10/10
4-7	12.5 (10)	10/10	11.7 (10)	94	10/10	11.8 (10)	94	10/10	11.9 (10)	95	10/10	11.8 (10)	94	10/10
5-7	12.0 (10)	10/10	11.6 (10)	97	10/10	11.7 (10)	98	10/10	11.4 (10)	95	10/10	11.3 (10)	94	10/10
6-7	11.9 (10)	10/10	11.5 (10)	97	10/10	11.6 (10)	97	10/10	11.7 (10)	98	10/10	11.5 (10)	97	10/10
7-7	10.9 (10)	10/10	11.0 (10)	101	10/10	11.2 (10)	103	10/10	11.2 (10)	103	10/10	10.9 (10)	100	10/10
8-7	11.0 (10)	10/10	11.2 (10)	102	10/10	10.8 (10)	98	10/10	11.3 (10)	103	10/10	11.1 (10)	101	10/10
9-7	11.2 (10)	10/10	11.2 (10)	100	10/10	11.0 (10)	98	10/10	11.1 (10)	99	10/10	10.9 (10)	97	10/10
10-7	11.2 (10)	10/10	11.0 (10)	98	10/10	10.5 (10)	94	10/10	10.9 (10)	97	10/10	10.8 (10)	96	10/10
11-7	11.0 (10)	10/10	11.1 (10)	101	10/10	11.0 (10)	100	10/10	11.0 (10)	100	10/10	10.9 (10)	99	10/10
12-7	11.3 (10)	10/10	11.7 (10)	104	10/10	11.2 (10)	99	10/10	11.7 (10)	104	10/10	11.1 (10)	98	10/10
13-7	11.1 (10)	10/10	11.3 (10)	102	10/10	11.3 (10)	102	10/10	11.2 (10)	101	10/10	11.3 (10)	102	10/10

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

TABLE E3

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	15.5± 0.6	16.0± 1.2	16.7± 1.0	16.8± 1.2	16.6± 1.5	16.2± 1.1	15.4± 0.9
6.3 mg/m3	15.6± 0.8	15.9± 0.9	16.6± 1.0	17.2± 1.2	16.6± 1.3	16.0± 0.7	15.8± 0.8
12.5 mg/m3	15.8± 1.0	16.1± 1.2	16.7± 1.5	17.2± 1.6	16.8± 1.2	16.4± 1.2	16.5± 1.1
25 mg/m3	15.9± 1.1	16.1± 0.7	16.7± 1.0	16.8± 0.8	16.8± 1.0	16.6± 0.8	16.1± 0.6
50 mg/m3	16.0± 0.9	16.3± 1.2	16.2± 1.4	17.0± 1.0	16.9± 0.8	16.6± 0.9	16.3± 1.0

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	15.7± 1.2	16.1± 1.4	15.8± 1.3	15.6± 1.1	15.7± 1.1	15.8± 1.6
6.3 mg/m3	16.1± 0.9	15.8± 1.1	15.8± 1.2	15.9± 1.3	16.3± 1.3	16.0± 1.1
12.5 mg/m3	16.4± 1.0	16.4± 1.1	16.4± 1.1	16.5± 1.2	16.6± 1.0	16.3± 0.8
25 mg/m3	16.6± 0.5	16.5± 0.8	16.8± 0.7	16.4± 1.0	17.0± 0.9	17.0± 1.0
50 mg/m3	16.1± 0.7	16.1± 0.6	16.4± 0.8	16.4± 0.9	16.6± 0.8	16.5± 0.9

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

Test of Dunnett

TABLE E4

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	12.3± 0.5	12.7± 0.6	12.2± 0.5	12.5± 0.6	12.0± 0.6	11.9± 0.6	10.9± 0.8
6.3 mg/m3	12.6± 1.2	12.0± 0.7	11.9± 0.4	11.7± 0.4	11.6± 0.6	11.5± 0.6	11.0± 1.0
12.5 mg/m3	12.3± 0.6	11.7± 0.9**	11.9± 0.4	11.8± 0.4	11.7± 0.4	11.6± 0.7	11.2± 0.4
25 mg/m3	12.3± 0.5	11.9± 0.6*	11.8± 0.8	11.9± 1.0	11.4± 0.9	11.7± 1.1	11.2± 1.0
50 mg/m3	12.6± 0.7	11.9± 0.5*	11.7± 0.6	11.8± 0.3	11.3± 0.6	11.5± 0.7	10.9± 0.6

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	11.0± 0.7	11.2± 0.8	11.2± 0.6	11.0± 0.7	11.3± 0.6	11.1± 0.7
6.3 mg/m3	11.2± 1.2	11.2± 0.9	11.0± 1.0	11.1± 1.3	11.7± 1.6	11.3± 1.6
12.5 mg/m3	10.8± 1.0	11.0± 0.9	10.5± 0.9	11.0± 0.9	11.2± 0.5	11.3± 0.7
25 mg/m3	11.3± 1.1	11.1± 1.1	10.9± 0.8	11.0± 1.1	11.7± 1.1	11.2± 1.0
50 mg/m3	11.1± 1.1	10.9± 0.7	10.8± 0.5	10.9± 0.4	11.1± 0.5	11.3± 0.9

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

Test of Dunnett

TABLE F1

HEMATOLOGY : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCrI CrI j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

REPORT TYPE : A1

Group Name	NO. of Animals	RED BLOOD CELL 1 0 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 1 0 ³ /μl	
Control	5	9.35±	0.20	15.4±	0.2	45.4±	0.6	48.5±	0.6	16.5±	0.2	33.9±	0.5	762±	31
6.3 mg/m3	5	9.18±	0.28	15.2±	0.6	44.8±	0.9	48.9±	0.6	16.5±	0.2	33.9±	0.7	719±	29
12.5 mg/m3	5	9.30±	0.17	15.3±	0.4	44.9±	0.8	48.3±	0.3	16.4±	0.2	34.0±	0.4	751±	42
25 mg/m3	5	9.37±	0.21	15.4±	0.3	45.5±	1.2	48.6±	0.5	16.5±	0.2	33.9±	0.6	773±	46
50 mg/m3	5	9.34±	0.09	15.3±	0.3	45.1±	0.6	48.3±	0.4	16.3±	0.2	33.9±	0.7	756±	65

Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	RETICULOCYTE %		PROTHROMBIN TIME sec		APTT sec	
Control	5	2.1±	0.1	12.3±	0.3	16.6±	0.6
6.3 mg/m3	5	2.2±	0.3	12.3±	0.4	17.0±	0.8
12.5 mg/m3	5	2.0±	0.1	12.4±	0.1	17.6±	0.6
25 mg/m3	5	2.2±	0.1	12.2±	0.1	17.3±	0.5
50 mg/m3	5	2.0±	0.2	12.3±	0.2	17.8±	0.6

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

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	WBC		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
		10 ⁹ /μl		NEUTRO		LYMPHO									
Control	5	4.50±	0.88	31.4±	5.2	64.6±	5.0	1.7±	0.2	1.1±	0.2	0.1±	0.1	1.1±	0.2
6.3 mg/m3	5	3.54±	0.49	34.6±	5.0	61.6±	5.0	1.6±	0.4	1.4±	0.1	0.1±	0.1	0.6±	0.3
12.5 mg/m3	5	3.64±	0.33	30.3±	4.2	65.4±	4.0	1.7±	0.2	1.4±	0.2*	0.1±	0.1	1.0±	0.2
25 mg/m3	5	4.01±	0.74	31.7±	4.6	64.2±	4.9	1.5±	0.3	1.5±	0.3*	0.1±	0.1	0.9±	0.2
50 mg/m3	5	3.69±	0.56	31.9±	0.7	63.6±	0.8	1.6±	0.5	1.8±	0.2**	0.1±	0.1	1.0±	0.3

Significant difference : * : P ≤ 0.05

** : P ≤ 0.01

Test of Dunnett

TABLE F2

HEMATOLOGY : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCrI CrI j[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 /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ³ /μl	
Control	5	8.61±	0.33	15.2±	0.6	43.9±	1.7	51.0±	0.5	17.7±	0.2	34.6±	0.7	793±	48
6.3 mg/m3	5	8.63±	0.17	15.2±	0.2	44.3±	1.0	51.3±	0.3	17.6±	0.3	34.3±	0.7	766±	42
12.5 mg/m3	5	8.54±	0.17	15.0±	0.4	44.0±	0.8	51.5±	0.3	17.5±	0.2	34.0±	0.5	799±	48
25 mg/m3	5	8.31±	0.21	14.8±	0.3	43.0±	1.1	51.7±	0.1*	17.7±	0.2	34.3±	0.5	788±	43
50 mg/m3	5	8.69±	0.47	15.5±	1.0	44.4±	2.2	51.1±	0.3	17.8±	0.3	34.8±	0.6	750±	62

Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	RETICULOCYTE %		PROTHROMBIN TIME s e c		APTT s e c	
Control	5	1.7±	0.1	11.9±	0.2	13.2±	0.9
6.3 mg/m3	5	1.9±	0.2	12.3±	0.3	13.6±	1.1
12.5 mg/m3	5	2.0±	0.2	12.2±	0.3	14.2±	0.6
25 mg/m3	5	1.9±	0.3	12.0±	0.5	13.3±	0.7
50 mg/m3	5	1.9±	0.2	12.1±	0.5	12.6±	1.3

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

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	WBC		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
		10 ⁹ /μl		NEUTRO		LYMPHO									
Control	5	2.07±	0.56	25.0±	6.2	70.4±	6.6	2.0±	0.6	1.1±	0.2	0.3±	0.1	1.1±	0.1
6.3 mg/m3	5	1.80±	0.50	29.5±	7.0	65.7±	6.6	1.9±	0.3	1.5±	0.3	0.3±	0.2	1.0±	0.7
12.5 mg/m3	5	1.85±	0.43	26.8±	3.3	68.6±	3.1	1.9±	0.4	1.4±	0.3	0.1±	0.1	1.3±	0.8
25 mg/m3	5	1.98±	0.30	29.3±	5.0	65.8±	5.3	2.1±	0.4	1.7±	0.5	0.1±	0.1	0.9±	0.1
50 mg/m3	5	2.39±	0.84	30.1±	4.3	65.4±	4.2	1.7±	0.3	1.8±	0.5	0.2±	0.2	0.9±	0.4

Significant difference : * : P ≤ 0.05

** : P ≤ 0.01

Test of Dunnett

TABLE G1

BIOCHEMISTRY : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	5	6.1±	0.1	3.3±	0.1	1.2±	0.0	0.03±	0.00	202±	11	71±	6	62±	15
6.3 mg/m3	5	6.1±	0.2	3.3±	0.2	1.2±	0.1	0.03±	0.01	218±	13	68±	3	54±	7
12.5 mg/m3	5	6.1±	0.1	3.4±	0.1	1.2±	0.0	0.03±	0.01	214±	21	70±	4	53±	13
25 mg/m3	5	6.2±	0.1	3.3±	0.0	1.2±	0.0	0.03±	0.00	210±	15	70±	4	49±	9
50 mg/m3	5	6.1±	0.2	3.3±	0.1	1.2±	0.1	0.03±	0.01	215±	17	67±	5	59±	5

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCrIj[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST U/L		ALT U/L		LDH U/L		ALP U/L		G-GTP U/L		CK U/L	
Control	5	117±	7	102±	27	59±	12	122±	25	360±	23	0.7±	0.1	105±	14
6.3 mg/m3	5	116±	5	161±	45	78±	20	179±	51	373±	22	0.6±	0.1	119±	38
12.5 mg/m3	5	115±	6	126±	53	66±	19	131±	54	400±	45	0.7±	0.2	98±	16
25 mg/m3	5	115±	4	111±	37	57±	9	106±	40	390±	31	0.7±	0.1	105±	15
50 mg/m3	5	114±	5	90±	18	53±	10	90±	18	373±	22	0.6±	0.1	101±	13

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	UREA NITROGEN		CREATININE		SODIUM		POTASSIUM		CHLORIDE		CALCIUM		INORGANIC PHOSPHORUS	
		mg/dl		mg/dl		mEq/l		mEq/l		mEq/l		mg/dl		mg/dl	
Control	5	20.6±	1.1	0.32±	0.03	142±	1	3.2±	0.1	103±	1	10.1±	0.1	5.6±	0.3
6.3 mg/m3	5	20.1±	1.3	0.33±	0.03	142±	1	3.1±	0.1	103±	1	9.9±	0.1	5.0±	0.4
12.5 mg/m3	5	21.5±	1.2	0.36±	0.02	142±	1	3.0±	0.1	102±	0	10.0±	0.2	5.2±	0.3
25 mg/m3	5	22.1±	1.2	0.35±	0.04	142±	0	3.0±	0.1	102±	1	9.9±	0.1	5.3±	0.2
50 mg/m3	5	20.1±	1.7	0.33±	0.03	142±	0	3.0±	0.2	102±	1	10.0±	0.2	5.1±	0.4

Significant difference : * : P ≤ 0.05

** : P ≤ 0.01

Test of Dunnett

TABLE G2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCrI CrI j[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	5	6.1±	0.1	3.4±	0.1	1.2±	0.1	0.03±	0.01	134±	6	79±	5	18±	3
6.3 mg/m3	5	6.2±	0.1	3.5±	0.1	1.3±	0.1	0.04±	0.01	137±	10	79±	9	15±	6
12.5 mg/m3	5	6.2±	0.1	3.5±	0.1	1.3±	0.1	0.03±	0.01	124±	9	83±	4	12±	2
25 mg/m3	5	6.1±	0.2	3.4±	0.1	1.2±	0.1	0.04±	0.01	131±	7	78±	9	16±	6
50 mg/m3	5	6.1±	0.2	3.4±	0.1	1.3±	0.0	0.03±	0.01	143±	4	84±	7	23±	5

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST U/L		ALT U/L		LDH U/L		ALP U/L		G-GTP U/L		CK U/L	
Control	5	145±	9	60±	5	32±	8	62±	10	305±	31	0.9±	0.1	88±	13
6.3 mg/m3	5	140±	17	73±	9**	40±	9	73±	15	307±	15	1.1±	0.2	94±	7
12.5 mg/m3	5	149±	6	63±	4	28±	4	82±	26	293±	28	1.0±	0.2	101±	14
25 mg/m3	5	139±	15	63±	5	31±	3	93±	32	303±	44	1.0±	0.2	114±	25
50 mg/m3	5	149±	16	71±	4*	34±	5	121±	38**	326±	24	1.2±	0.3	138±	44

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	5	19.0±	0.8	0.34±	0.02	143±	1	3.1±	0.1	104±	1	9.9±	0.1	5.5±	0.6
6.3 mg/m3	5	21.9±	1.8*	0.34±	0.03	143±	1	3.0±	0.1	105±	2	9.8±	0.3	4.6±	0.7
12.5 mg/m3	5	20.1±	1.6	0.35±	0.03	144±	1	3.1±	0.2	105±	1	9.8±	0.1	5.0±	0.4
25 mg/m3	5	21.0±	1.5	0.36±	0.02	144±	1	3.1±	0.2	105±	1	10.0±	0.2	6.0±	0.9
50 mg/m3	5	23.7±	0.8**	0.34±	0.04	143±	1	3.2±	0.2	104±	1	9.9±	0.3	6.2±	1.3

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

TABLE H1

BALF : CYTOLOGICAL ANALYSIS, RELATIVE : MALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE

BALF: CYTOLOGICAL ANALYSIS:RELATIVE (SUMMARY)
ALL ANIMALS (13W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	TOTAL CELLS		Differential BALF Cells (%)									
		Cells / $\mu\ell$		NEUTRO		LYMPHO		EOSINO		ALVEOLAR MACROPHAGE		OTHER	
Control	5	330.00±	36.06	0.1±	0.1	0.1±	0.1	0.0±	0.0	99.9±	0.2	0.0±	0.0
6.3 mg/m ³	5	316.00±	43.36	0.1±	0.2	0.2±	0.4	0.0±	0.0	99.7±	0.4	0.0±	0.0
12.5 mg/m ³	5	332.00±	58.91	0.6±	0.3 **	0.7±	1.0	0.0±	0.1	98.6±	1.4 **	0.0±	0.0
25 mg/m ³	5	344.00±	42.19	3.6±	1.2 **	1.1±	0.4 **	0.0±	0.0	95.4±	1.5 **	0.0±	0.0
50 mg/m ³	5	430.00±	27.39 **	16.0±	2.4 **	3.3±	1.5 **	0.0±	0.0	80.7±	3.3 **	0.0±	0.0

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

TABLE H2

BALF : CYTOLOGICAL ANALYSIS, RELATIVE : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
 MEASURE TIME : 1
 SEX : FEMALE

BALF: CYTOLOGICAL ANALYSIS:RELATIVE (SUMMARY)
 ALL ANIMALS (13W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	TOTAL CELLS		Differential BALF Cells (%)									
		Cells / $\mu\ell$		NEUTRO		LYMPHO		EOSINO		ALVEOLAR MACROPHAGE		OTHER	
Control	5	350.00±	59.58	0.0±	0.1	0.4±	0.3	0.0±	0.0	99.6±	0.3	0.0±	0.0
6.3 mg/m ³	5	308.00±	44.38	0.4±	0.3 *	0.5±	0.2	0.0±	0.0	99.1±	0.4 *	0.0±	0.0
12.5 mg/m ³	5	338.00±	69.79	1.8±	1.6 **	1.3±	1.1	0.0±	0.0	96.9±	2.6 **	0.0±	0.0
25 mg/m ³	5	368.00±	130.08	6.4±	1.6 **	2.5±	1.2 **	0.0±	0.0	91.1±	2.6 **	0.0±	0.0
50 mg/m ³	5	492.00±	82.28 *	41.0±	8.7 **	5.6±	1.0 **	0.0±	0.0	53.3±	9.1 **	0.0±	0.0

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

TABLE I1

BALF : CYTOLOGICAL ANALYSIS, ABSOLUTE : MALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE

BALF: CYTOLOGICAL ANALYSIS:ABSOLUTE (SUMMARY)
ALL ANIMALS (13W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	TOTAL CELLS		Differential BALF Cells (count / $\mu\ell$)						ALVEOLAR MACROPHAGE		OTHER	
		Cells / $\mu\ell$		NEUTRO		LYMPHO		EOSINO					
Control	5	330.00±	36.06	0.22±	0.30	0.23±	0.32	0.00±	0.00	329.56±	36.34	0.00±	0.00
6.3 mg/m ³	5	316.00±	43.36	0.34±	0.51	0.85±	1.65	0.00±	0.00	314.81±	42.38	0.00±	0.00
12.5 mg/m ³	5	332.00±	58.91	1.93±	0.71**	1.87±	2.31	0.08±	0.17	328.13±	61.63	0.00±	0.00
25 mg/m ³	5	344.00±	42.19	12.24±	4.16**	3.62±	1.31*	0.00±	0.00	328.14±	41.91	0.00±	0.00
50 mg/m ³	5	430.00±	27.39**	68.48±	9.59**	13.81±	5.82**	0.00±	0.00	347.71±	34.24	0.00±	0.00

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

TABLE I2

BALF : CYTOLOGICAL ANALYSIS, ABSOLUTE : FEMALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j [F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE

BALF: CYTOLOGICAL ANALYSIS:ABSOLUTE (SUMMARY)
ALL ANIMALS (13W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	TOTAL CELLS		Differential BALF Cells (count / $\mu\ell$)						ALVEOLAR MACROPHAGE		OTHER	
		Cells / $\mu\ell$		NEUTRO		LYMPHO		EOSINO					
Control	5	350.00±	59.58	0.10±	0.22	1.49±	1.18	0.00±	0.00	348.41±	59.13	0.00±	0.00
6.3 mg/m ³	5	308.00±	44.38	1.19±	0.85 *	1.55±	0.67	0.00±	0.00	305.26±	44.34	0.00±	0.00
12.5 mg/m ³	5	338.00±	69.79	6.00±	4.94 **	4.81±	4.49	0.00±	0.00	327.19±	65.67	0.00±	0.00
25 mg/m ³	5	368.00±	130.08	22.33±	4.14 **	8.48±	3.00 **	0.00±	0.00	337.18±	128.49	0.00±	0.00
50 mg/m ³	5	492.00±	82.28 *	202.86±	62.25 **	28.25±	9.02 **	0.00±	0.00	260.89±	54.86	0.00±	0.00

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

TABLE J1

BALF : BIOCHEMICAL ANALYSIS : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

BALF: BIOCHEMICAL ANALYSIS (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	TOTAL PROTEIN u g / m L		ALBUMIN u g / m L		LDH U / L		ALP U / L		G-GTP U / L	
Control	5	63±	9	20±	3	24±	5	122±	22	1.4±	0.2
6.3 mg/m3	5	69±	9	23±	2	28±	4	135±	13	1.2±	0.1
12.5 mg/m3	5	77±	6*	24±	1*	30±	2*	119±	12	1.4±	0.3
25 mg/m3	5	77±	7*	23±	2	33±	1**	98±	12*	1.4±	0.3
50 mg/m3	5	105±	6**	30±	2**	60±	3**	106±	7	1.8±	0.2

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

Test of Dunnett

TABLE J2

BALF : BIOCHEMICAL ANALYSIS : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

BALF: BIOCHEMICAL ANALYSIS (SUMMARY)
 ALL ANIMALS (14W)

Group Name	NO. of Animals	TOTAL PROTEIN u g / m L		ALBUMIN u g / m L		LDH U / L		ALP U / L		G-GTP U / L	
Control	5	77±	4	26±	1	30±	3	142±	9	1.8±	0.4
6.3 mg/m3	5	85±	10	29±	3	36±	2*	151±	8	1.8±	0.3
12.5 mg/m3	5	88±	6*	29±	1*	38±	5**	135±	13	1.5±	0.1
25 mg/m3	5	87±	4*	28±	2	42±	2**	116±	8**	2.0±	0.5
50 mg/m3	5	148±	19**	42±	4**	108±	16**	121±	11*	2.5±	0.5

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

Test of Dunnett

TABLE K1

GROSS FINDINGS : MALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control			
			10 (%)	6.3 mg/m3 10 (%)	12.5 mg/m3 10 (%)	25 mg/m3 10 (%)
lung	white zone		0 (0)	0 (0)	0 (0)	10 (100)
lymph node	white		0 (0)	0 (0)	0 (0)	7 (70)
liver	herniation		2 (20)	2 (20)	1 (10)	0 (0)

(HPT080)

BAIS 5

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	50 mg/m3 10 (%)
lung	white zone		10 (100)
lymph node	white		9 (90)
liver	herniation		1 (10)

(HPT080)

BAIS 5

TABLE K2

GROSS FINDINGS : FEMALE

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)

Organ	Findings	Group Name NO. of Animals	Control			
			10 (%)	6.3 mg/m3 10 (%)	12.5 mg/m3 10 (%)	25 mg/m3 10 (%)
lung	white zone		0 (0)	0 (0)	0 (0)	10 (100)
lymph node	white		0 (0)	0 (0)	0 (0)	6 (60)
liver	herniation		0 (0)	2 (20)	0 (0)	0 (0)

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	50 mg/m ³ 10 (%)
lung	white zone		10 (100)
lymph node	white		10 (100)
liver	herniation		1 (10)

(HPT080)

BAIS 5

TABLE L1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight		THYMUS		ADRENALS		TESTES		HEART		LUNGS	
Control	10	272±	20	0.202±	0.034	0.051±	0.008	3.088±	0.084	0.815±	0.051	0.919±	0.067
6.3 mg/m3	10	275±	19	0.216±	0.026	0.053±	0.010	3.067±	0.152	0.838±	0.073	0.938±	0.093
12.5 mg/m3	10	281±	12	0.231±	0.060	0.051±	0.009	3.053±	0.090	0.839±	0.046	1.003±	0.053
25 mg/m3	10	282±	13	0.232±	0.027	0.056±	0.009	3.090±	0.175	0.839±	0.049	1.054±	0.023**
50 mg/m3	10	282±	14	0.231±	0.027	0.052±	0.009	3.119±	0.074	0.865±	0.055	1.050±	0.047*

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	1.679±	0.070	0.556±	0.043	6.563±	0.439	1.871±	0.050
6.3 mg/m3	10	1.711±	0.108	0.552±	0.035	6.628±	0.542	1.870±	0.027
12.5 mg/m3	10	1.716±	0.090	0.578±	0.028	6.786±	0.383	1.904±	0.047
25 mg/m3	10	1.733±	0.077	0.584±	0.030	6.823±	0.453	1.901±	0.023
50 mg/m3	10	1.741±	0.103	0.578±	0.047	6.873±	0.474	1.888±	0.036

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

TABLE L2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	156±	7	0.180±	0.021	0.057±	0.008	0.095±	0.017	0.566±	0.047	0.674±	0.062
6.3 mg/m3	10	157±	9	0.178±	0.022	0.058±	0.009	0.093±	0.014	0.569±	0.034	0.693±	0.032
12.5 mg/m3	10	159±	7	0.184±	0.021	0.055±	0.008	0.094±	0.021	0.565±	0.045	0.731±	0.044
25 mg/m3	10	159±	11	0.182±	0.019	0.055±	0.008	0.095±	0.016	0.574±	0.043	0.791±	0.021**
50 mg/m3	10	154±	5	0.186±	0.021	0.053±	0.004	0.086±	0.013	0.556±	0.033	0.791±	0.059**

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

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	1.077±	0.064	0.352±	0.029	3.756±	0.253	1.762±	0.061
6.3 mg/m3	10	1.099±	0.059	0.360±	0.025	3.723±	0.243	1.746±	0.024
12.5 mg/m3	10	1.091±	0.041	0.376±	0.038	3.818±	0.263	1.757±	0.070
25 mg/m3	10	1.105±	0.048	0.368±	0.028	3.823±	0.309	1.751±	0.060
50 mg/m3	10	1.088±	0.064	0.362±	0.025	3.737±	0.212	1.760±	0.039

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

TABLE M1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	272± 20	0.074± 0.011	0.019± 0.002	1.142± 0.075	0.301± 0.014	0.328± 0.019
6.3 mg/m3	10	275± 19	0.079± 0.008	0.019± 0.004	1.118± 0.079	0.305± 0.021	0.350± 0.032
12.5 mg/m3	10	281± 12	0.082± 0.020	0.018± 0.004	1.087± 0.050	0.298± 0.016	0.359± 0.010
25 mg/m3	10	282± 13	0.082± 0.008	0.020± 0.003	1.098± 0.080	0.298± 0.013	0.372± 0.013**
50 mg/m3	10	282± 14	0.082± 0.010	0.019± 0.004	1.106± 0.038	0.306± 0.010	0.373± 0.014**

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT : %

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

PAGE : 2

Group Name	NO. of Animals	KIDNEYS	SPLEEN	LIVER	BRAIN
Control	10	0.620 ± 0.033	0.205 ± 0.011	2.419 ± 0.069	0.693 ± 0.056
6.3 mg/m3	10	0.622 ± 0.018	0.201 ± 0.004	2.407 ± 0.047	0.682 ± 0.042
12.5 mg/m3	10	0.611 ± 0.026	0.206 ± 0.014	2.413 ± 0.095	0.678 ± 0.039
25 mg/m3	10	0.615 ± 0.029	0.207 ± 0.009	2.417 ± 0.076	0.675 ± 0.029
50 mg/m3	10	0.617 ± 0.028	0.205 ± 0.010	2.433 ± 0.080	0.670 ± 0.028

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

Test of Dunnett

TABLE M2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	156± 7	0.115± 0.009	0.037± 0.005	0.061± 0.009	0.362± 0.022	0.423± 0.023
6.3 mg/m3	10	157± 9	0.114± 0.014	0.037± 0.006	0.060± 0.009	0.363± 0.022	0.439± 0.024
12.5 mg/m3	10	159± 7	0.116± 0.011	0.034± 0.004	0.059± 0.012	0.355± 0.024	0.459± 0.015
25 mg/m3	10	159± 11	0.114± 0.008	0.035± 0.006	0.060± 0.009	0.363± 0.016	0.486± 0.026**
50 mg/m3	10	154± 5	0.121± 0.011	0.034± 0.003	0.056± 0.008	0.361± 0.018	0.518± 0.027**

Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01

Test of Dunnett

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[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	0.689 ± 0.024	0.225 ± 0.013	2.403 ± 0.121	1.128 ± 0.040
6.3 mg/m3	10	0.701 ± 0.036	0.229 ± 0.011	2.373 ± 0.054	1.116 ± 0.063
12.5 mg/m3	10	0.685 ± 0.028	0.235 ± 0.016	2.394 ± 0.098	1.103 ± 0.047
25 mg/m3	10	0.699 ± 0.040	0.232 ± 0.009	2.412 ± 0.102	1.108 ± 0.057
50 mg/m3	10	0.706 ± 0.030	0.235 ± 0.012	2.426 ± 0.100	1.144 ± 0.046

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

Test of Dunnett

TABLE N1

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10					
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)		
[Respiratory system]																			
nasal cavit	goblet cell hyperplasia	<10>				<10>				<10>				<10>					
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	6 (60)	0 (0)	0 (0)	0 (0)	0 (0)	
	eosinophilic change:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	9 (90)	0 (0)	0 (0)	0 (0)	0 (0)	
nasopharynx	goblet cell hyperplasia	<10>				<10>				<10>				<10>					
		0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	8 (80)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of particle:lymphoid tissue	0 (0)	0 (0)	0 (0)	0 (0)	6 (60)	0 (0)	0 (0)	0 (0)	7 (70)	0 (0)	0 (0)	0 (0)	6 (60)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
lung	osseous metaplasia	<10>				<10>				<10>				<10>					
		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)	0 (0)	0 (0)
	hyperplasia:alveolar epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	5 (50)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)
		50 mg/m3 10			
[Respiratory system]					
nasal cavit	goblet cell hyperplasia	10 (100)	0 (0)	0 (0)	0 (0) **
	eosinophilic change:olfactory epithelium	10 (100)	0 (0)	0 (0)	0 (0) **
	eosinophilic change:respiratory epithelium	10 (100)	0 (0)	0 (0)	0 (0) **
nasopharynx	goblet cell hyperplasia	10 (100)	0 (0)	0 (0)	0 (0) **
	deposit of particle:lymphoid tissue	9 (90)	0 (0)	0 (0)	0 (0) **
lung	osseous metaplasia	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:alveolar epithelium	0 (0)	10 (100)	0 (0)	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 ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]																		
lung	destruction of alveolar macrophage		<10>				<10>				<10>				<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)	(0)	(0)
	deposit of particle:alveolar space,phagocytosed by alveolar macrophages		0	0	0	0	10	0	0	0 **	10	0	0	0 **	10	0	0	0 **
			(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	deposit of particle:bronchus-associated lymphoid tissue		0	0	0	0	6	0	0	0 *	9	0	0	0 **	9	0	0	0 **
			(0)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(90)	(0)	(0)	(0)
[Hematopoietic system]																		
lymph node	deposit of particle		<10>				<10>				<10>				<10>			
			0	0	0	0	3	0	0	0	6	0	0	0 *	9	0	0	0 **
			(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(90)	(0)	(0)	(0)
[Circulatory system]																		
heart	inflammatory cell nest		<10>				<10>				<10>				<10>			
			0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)
50 mg/m3 10					
[Respiratory system]					
lung	destruction of alveolar macrophage	9 (90)	0 (0)	0 (0)	0 (0) **
	deposit of particle:alveolar space,phagocytosed by alveo	0 (0)	10 (100)	0 (0)	0 (0) **
	deposit of particle:bronchus-associated lymphoid tissue	10 (100)	0 (0)	0 (0)	0 (0) **
[Hematopoietic system]					
lymph node	deposit of particle	5 (50)	5 (50)	0 (0)	0 (0) **
[Circulatory system]					
heart	inflammatory cell nest	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
{Circulatory system}																	
heart	myocardial fibrosis	<10>				<10>				<10>				<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)	(0)	(0)
{Digestive system}																	
liver	herniation	<10>				<10>				<10>				<10>			
		2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	inflammatory cell nest	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)
{Urinary system}																	
kidney	eosinophilic body	<10>				<10>				<10>				<10>			
		10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0
		(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+	2+	3+	4+
		50 mg/m3			
		10			
		1+	2+	3+	4+
		(%)	(%)	(%)	(%)
[Circulatory system]					
heart	myocardial fibrosis	1 (10)	0 (0)	0 (0)	0 (0)
		<10>			
[Digestive system]					
liver	herniation	1 (10)	0 (0)	0 (0)	0 (0)
		<10>			
	inflammatory cell nest	2 (20)	0 (0)	0 (0)	0 (0)
[Urinary system]					
kidney	eosinophilic body	10 (100)	0 (0)	0 (0)	0 (0)
		<10>			
	inflammatory infiltration	1 (10)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study				Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10				
		Grade	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)				
[Urinary system]																						
kidney	regeneration:proximal tubule		<10>				<10>				<10>				<10>							
			0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	(0) (0) (0) (0)	(0) (0) (0) (0)	(0) (0) (0) (0)	(30) (0) (0) (0)
[Endocrine system]																						
pituitary	cyst formation		<10>				<10>				<10>				<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) (0) (0)
	Rathke pouch		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)	(0) (0) (0) (0)
thyroid	ultimobranchial body remanet		<10>				<10>				<10>				<10>							
			0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	(0) (0) (0) (0)	(10) (0) (0) (0)	(10) (0) (0) (0)	(0) (0) (0) (0)
[Reproductive system]																						
testis	tubular atrophy		<10>				<10>				<10>				<10>							
			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)

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 ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ Grade (%)	2+ Grade (%)	3+ Grade (%)	4+ Grade (%)
[Urinary system]					
kidney		50 mg/m3 10			
	regeneration:proximal tubule	0 (0)	0 (0)	0 (0)	0 (0)
[Endocrine system]					
pituitary		<10>			
	cyst formation	2 (20)	0 (0)	0 (0)	0 (0)
	Rathke pouch	1 (10)	0 (0)	0 (0)	0 (0)
thyroid		<10>			
	ultimobranchial body remanet	2 (20)	0 (0)	0 (0)	0 (0)
[Reproductive system]					
testis		<10>			
	tubular atrophy	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study Grade	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
			1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Reproductive system]																		
epididymis	debris of spermatic elements		<10>				<10>				<10>				<10>			
			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)
prostate	inflammation		<10>				<10>				<10>				<10>			
			1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
[Special sense organs/appendage]																		
eye	mineralization:cornea		<10>				<10>				<10>				<10>			
			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)	(0)	(0)	(0)	(0)
Harder gl	inflammatory infiltration		<10>				<10>				<10>				<10>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)
		50 mg/m3 10			
[Reproductive system]					
epididymis		<10>			
	debris of spermatic elements	0 (0)	0 (0)	0 (0)	0 (0)
prostate		<10>			
	inflammation	0 (0)	0 (0)	0 (0)	0 (0)
[Special sense organs/appendage]					
eye		<10>			
	mineralization:cornea	0 (0)	0 (0)	0 (0)	0 (0)
Harder gl		<10>			
	inflammatory infiltration	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

TABLE N2

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]																	
nasal cavit	goblet cell hyperplasia	<10>				<10>				<10>				<10>			
		0	0	0	0	3	0	0	0	5	0	0	0 *	10	0	0	0 **
		(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium	<10>				<10>				<10>				<10>			
		0	0	0	0	1	0	0	0	9	0	0	0 **	10	0	0	0 **
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium	<10>				<10>				<10>				<10>			
		0	0	0	0	0	0	0	0	10	0	0	0 **	10	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
nasopharynx	inflammation	<10>				<10>				<10>				<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)	(0)	(0)
	goblet cell hyperplasia	<10>				<10>				<10>				<10>			
		0	0	0	0	1	0	0	0	5	0	0	0 *	9	0	0	0 **
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(90)	(0)	(0)	(0)
	deposit of particle:lymphoid tissue	<10>				<10>				<10>				<10>			
		0	0	0	0	9	0	0	0 **	8	0	0	0 **	9	0	0	0 **
		(0)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(90)	(0)	(0)	(0)
lung	osseous metaplasia	<10>				<10>				<10>				<10>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ Grade (%)	2+ Grade (%)	3+ Grade (%)	4+ Grade (%)
50 mg/m3					
10					
<10>					
nasal cavit	goblet cell hyperplasia	10 (100)	0 (0)	0 (0)	0 (0) **
	eosinophilic change:olfactory epithelium	10 (100)	0 (0)	0 (0)	0 (0) **
	eosinophilic change:respiratory epithelium	10 (100)	0 (0)	0 (0)	0 (0) **
nasopharynx	inflammation	1 (10)	0 (0)	0 (0)	0 (0)
	goblet cell hyperplasia	10 (100)	0 (0)	0 (0)	0 (0) **
	deposit of particle:lymphoid tissue	9 (90)	0 (0)	0 (0)	0 (0) **
lung	osseous metaplasia	1 (10)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Respiratory system]																	
Lung	accumulation of foamy cells	<10>				<10>				<10>				<10>			
		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)	
	hyperplasia:alveolar epithelium	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	4 (40)	0 (0)	0 (0)	0 (0)	9 (90)	0 (0)	0 (0)	0 (0) **
	destruction of alveolar macrophage	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)	
	deposit of particle:alveolar space,phagocytosed by alveolar macrophages	0 (0)	0 (0)	0 (0)	0 (0)	10 (100)	0 (0)	0 (0)	0 (0) **	10 (100)	0 (0)	0 (0)	0 (0) **	10 (100)	0 (0)	0 (0)	0 (0) **
	deposit of particle:bronchus-associated lymphoid tissue	0 (0)	0 (0)	0 (0)	0 (0)	9 (90)	0 (0)	0 (0)	0 (0) **	9 (90)	0 (0)	0 (0)	0 (0) **	8 (80)	0 (0)	0 (0)	0 (0) **
[Hematopoietic system]																	
bone marrow	granulation	<10>				<10>				<10>				<10>			
		3 (30)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)
Lymph node	deposit of particle	<10>				<10>				<10>				<10>			
		0 (0)	0 (0)	0 (0)	0 (0)	6 (60)	0 (0)	0 (0)	0 (0) *	7 (70)	0 (0)	0 (0)	0 (0) **	9 (90)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)
		50 mg/m3 10			
[Respiratory system]					
lung		<10>			
	accumulation of foamy cells	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:alveolar epithelium	0 (0)	10 (100)	0 (0)	0 (0) **
	destruction of alveolar macrophage	9 (90)	0 (0)	0 (0)	0 (0) **
	deposit of particle:alveolar space,phagocytosed by alveo	0 (0)	10 (100)	0 (0)	0 (0) **
	deposit of particle:bronchus-associated lymphoid tissue	10 (100)	0 (0)	0 (0)	0 (0) **
[Hematopoietic system]					
bone marrow		<10>			
	granulation	3 (30)	0 (0)	0 (0)	0 (0)
lymph node		<10>			
	deposit of particle	5 (50)	5 (50)	0 (0)	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 ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
{Circulatory system}																	
heart		<10>				<10>				<10>				<10>			
	inflammatory cell nest	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 (10)	0 (0)	0 (0)	0 (0)
	myocardial fibrosis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Digestive system}																	
liver		<10>				<10>				<10>				<10>			
	herniation	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
	inflammatory cell nest	1 (10)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
	basophilic cell focus	0 (0)	0 (0)	0 (0)	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)
{Urinary system}																	
kidney		<10>				<10>				<10>				<10>			
	mineralization:tubule	4 (40)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)
50 mg/m3 10					
[Circulatory system]					
heart		<10>			
	inflammatory cell nest	0 (0)	0 (0)	0 (0)	0 (0)
	myocardial fibrosis	1 (10)	0 (0)	0 (0)	0 (0)
[Digestive system]					
liver		<10>			
	herniation	1 (10)	0 (0)	0 (0)	0 (0)
	inflammatory cell nest	1 (10)	0 (0)	0 (0)	0 (0)
	basophilic cell focus	0 (0)	0 (0)	0 (0)	0 (0)
[Urinary system]					
kidney		<10>			
	mineralization:tubule	2 (20)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0863
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Endocrine system]																	
pituitary	cyst formation	<10>				<10>				<10>				<10>			
		1 (10)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thyroid	ultimobranchial body remanet	<10>				<10>				<10>				<10>			
		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
[Reproductive system]																	
ovi d/v def	inflammatory infiltration	<10>				<10>				<10>				<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)	0 (0)
[Special sense organs/appendage]																	
Harder gl	inflammatory infiltration	<10>				<10>				<10>				<10>			
		1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
Harder gl	lymphocytic infiltration	<10>				<10>				<10>				<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)	1 (10)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Group Name No. of Animals on Study			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)
50 mg/m3					
10					
[Endocrine system]					
pituitary	cyst formation	<10>			
		0 (0)	0 (0)	0 (0)	0 (0)
thyroid	ultimobranchial body remanet	<10>			
		0 (0)	0 (0)	0 (0)	0 (0)
[Reproductive system]					
ovi d/v def	inflammatory infiltration	<10>			
		1 (10)	0 (0)	0 (0)	0 (0)
[Special sense organs/appendage]					
Harder gl	inflammatory infiltration	<10>			
		0 (0)	0 (0)	0 (0)	0 (0)
	lymphocytic infiltration	1 (10)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0- 14W)

Organ	Findings	Control 10				6.3 mg/m3 10				12.5 mg/m3 10				25 mg/m3 10			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
[Special sense organs/appendage]																	
Harder gl	granulation	<10>				<10>				<10>				<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)	(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 ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0863
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0- 14W)

PAGE : 20

Organ_____	Findings_____	Group Name	50 mg/m3			
		No. of Animals on Study	10			
		Grade	1+	2+	3+	4+
			(%)	(%)	(%)	(%)

{Special sense organs/appendage}

Harder gl

	<10>			
granulation	1	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

(HPT150)

BAIS5

TABLE O

AMOUNT OF TITANIUM DIOXIDE IN THE LUNG

AMOUNT OF TITANIUM DIOXIDE IN THE LUNG

Group Name	Amount of Titanium Dioxide (mg in 1g Lung)			
	No. of Animals	Male	No. of Animals	Female
6.3 mg/m ³	9	2.17 ± 0.56	10	1.27 ± 0.29
12.5 mg/m ³	10	3.49 ± 0.53	10	3.33 ± 0.59
25 mg/m ³	10	6.42 ± 0.90	10	8.72 ± 1.42
50 mg/m ³	10	18.35 ± 2.09	10	21.31 ± 3.59