

ジフェニルアミンのラットを用いた
経口投与によるがん原性試験（混餌試験）報告書

試験番号：0684

TABLES

TABLES

TABLE A 1 SURVIVAL ANIMAL NUMBERS: MALE

TABLE A 2 SURVIVAL ANIMAL NUMBERS: FEMALE

TABLE B 1 CLINICAL OBSERVATION: MALE

TABLE B 2 CLINICAL OBSERVATION: FEMALE

TABLE C 1 BODY WEIGHT CHANGES AND SURVIVAL ANIMAL NUMBERS:
MALE

TABLE C 2 BODY WEIGHT CHANGES AND SURVIVAL ANIMAL NUMBERS:
FEMALE

TABLE C 3 BODY WEIGHT CHANGES: MALE

TABLE C 4 BODY WEIGHT CHANGES: FEMALE

TABLE D 1 FOOD CONSUMPTION CHANGES AND SURVIVAL ANIMAL
NUMBERS: MALE

TABLE D 2 FOOD CONSUMPTION CHANGES AND SURVIVAL ANIMAL
NUMBERS: FEMALE

TABLE D 3 FOOD CONSUMPTION CHANGES: MALE

TABLE D 4 FOOD CONSUMPTION CHANGES: FEMALE

TABLE E 1 CHEMICAL INTAKE CHANGES: MALE

TABLE E 2 CHEMICAL INTAKE CHANGES: FEMALE

TABLE F 1 HEMATOLOGY: MALE

TABLE F 2 HEMATOLOGY: FEMALE

TABLE G 1 BIOCHEMISTRY: MALE

TABLE G 2 BIOCHEMISTRY: FEMALE

TABLES (CONTINUED)

TABLE H 1 URINALYSIS: MALE

TABLE H 2 URINALYSIS: FEMALE

TABLE I 1 GROSS FINDINGS: MALE: ALL ANIMALS

TABLE I 2 GROSS FINDINGS: MALE : DEAD AND MORIBUND ANIMALS

TABLE I 3 GROSS FINDINGS: MALE: SACRIFICED ANIMALS

TABLE I 4 GROSS FINDINGS: FEMALE: ALL ANIMALS

TABLE I 5 GROSS FINDINGS: FEMALE: DEAD AND MORIBUND ANIMALS

TABLE I 6 GROSS FINDINGS: FEMALE: SACRIFICED ANIMALS

TABLE J 1 ORGAN WEIGHT, ABSOLUTE: MALE

TABLE J 2 ORGAN WEIGHT, ABSOLUTE: FEMALE

TABLE K 1 ORGAN WEIGHT, RELATIVE: MALE

TABLE K 2 ORGAN WEIGHT, RELATIVE: FEMALE

TABLE L 1 HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS:
MALE: ALL ANIMALS

TABLE L 2 HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS:
MALE: DEAD AND MORIBUND ANIMALS

TABLE L 3 HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS:
MALE: SACRIFICED ANIMALS

TABLE L 4 HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS:
FEMALE: ALL ANIMALS

TABLE L 5 HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS:
FEMALE: DEAD AND MORIBUND ANIMALS

TABLE L 6 HISTOPATHOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS:
FEMALE: SACRIFICED ANIMALS

TABLES (CONTINUED)

TABLE M 1	NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED: MALE
TABLE M 2	NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED: FEMALE
TABLE N 1	HISTOPATHOLOGICAL FINDINGS: NEOPLASTIC LESIONS: MALE
TABLE N 2	HISTOPATHOLOGICAL FINDINGS: NEOPLASTIC LESIONS: FEMALE
TABLE O 1	NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS: MALE
TABLE O 2	NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS: FEMALE
TABLE P 1	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: MALE
TABLE P 2	HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR: FEMALE
TABLE Q 1	HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC LESIONS IN JAPAN BIOASSAY RESEARCH CENTER: F344/DuCr1Cr1j MALE RATS
TABLE Q 2	HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC LESIONS IN JAPAN BIOASSAY RESEARCH CENTER: F344/DuCr1Cr1j FEMALE RATS
TABLE R 1	CAUSE OF DEATH: MALE
TABLE R 2	CAUSE OF DEATH: FEMALE

TABLE A 1

SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															
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STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104
 SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 2

Group Name	Animals At start	Administration (Weeks)													
		14	15	16	17	18	19	20	21	22	23	24	25	26	27
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

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STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

PAGE : 3

Group Name	Animals At start	Administration (Weeks)													
		28	29	30	31	32	33	34	35	36	37	38	39	40	41
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

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STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

PAGE : 4

Group Name	Animals At start	Administration (Weeks)													
		42	43	44	45	46	47	48	49	50	51	52	53	54	55
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

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STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104
 SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 5

Group Name	Animals At start	Administration (Weeks)													
		56	57	58	59	60	61	62	63	64	65	66	67	68	69
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0
4000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

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STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

PAGE : 6

Group Name	Animals At start	Administration (Weeks)													
		70	71	72	73	74	75	76	77	78	79	80	81	82	83
Control	50	48/50	47/50	47/50	47/50	47/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50
		96.0	94.0	94.0	94.0	94.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
250 ppm	50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	48/50
		100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0	96.0	96.0	96.0	96.0
1000 ppm	50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	47/50
		98.0	98.0	98.0	98.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	94.0
4000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0

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

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STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

PAGE : 7

Group Name	Animals At start	Administration (Weeks)													
		84	85	86	87	88	89	90	91	92	93	94	95	96	97
Control	50	46/50	46/50	46/50	46/50	46/50	44/50	43/50	43/50	43/50	43/50	43/50	43/50	41/50	38/50
		92.0	92.0	92.0	92.0	92.0	88.0	86.0	86.0	86.0	86.0	86.0	86.0	82.0	76.0
250 ppm	50	48/50	48/50	48/50	48/50	48/50	47/50	47/50	46/50	46/50	46/50	44/50	43/50	43/50	43/50
		96.0	96.0	96.0	96.0	96.0	94.0	94.0	92.0	92.0	92.0	88.0	86.0	86.0	86.0
1000 ppm	50	47/50	47/50	47/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	45/50	45/50
		94.0	94.0	94.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	90.0	90.0
4000 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	48/50	47/50	47/50	46/50	46/50	46/50	46/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	96.0	94.0	94.0	92.0	92.0	92.0	92.0
Number of survival/ Number of effective animals Survival rate(%)															

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BAIS4

STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCrIj[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

PAGE : 8

Group Name	Animals At start	Administration (Weeks)						
		98	99	100	101	102	103	104
Control	50	38/50	38/50	38/50	37/50	37/50	37/50	37/50
		76.0	76.0	76.0	74.0	74.0	74.0	74.0
250 ppm	50	42/50	42/50	41/50	40/50	40/50	40/50	40/50
		84.0	84.0	82.0	80.0	80.0	80.0	80.0
1000 ppm	50	45/50	44/50	44/50	44/50	43/50	43/50	43/50
		90.0	88.0	88.0	88.0	86.0	86.0	86.0
4000 ppm	50	46/50	46/50	45/50	43/50	42/50	42/50	41/50
		92.0	92.0	90.0	86.0	84.0	84.0	82.0
Number of survival/ Number of effective animals		Survival rate(%)						

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TABLE A 2

SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

PAGE : 9

Group Name	Animals At start	Administration (Weeks)													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

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STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 10

Group Name	Animals At start	Administration (Weeks)													
		14	15	16	17	18	19	20	21	22	23	24	25	26	27
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)

(HAN360)

BAIS4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 11

Group Name	Animals At start	Administration (Weeks)													
		28	29	30	31	32	33	34	35	36	37	38	39	40	41
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

(HAN360)

BAIS4

STUDY NO. : 0684

SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

PAGE : 12

Group Name	Animals At start	Administration (Weeks)													
		42	43	44	45	46	47	48	49	50	51	52	53	54	55
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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
250 ppm	50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50
		98.0	98.0	98.0	98.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

(HAN360)

BAIS4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104
 SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 13

Group Name	Animals At start	Administration (Weeks)													
		56	57	58	59	60	61	62	63	64	65	66	67	68	69
Control	50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
250 ppm	50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

(HAN360)

BAIS4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104
 SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 14

Group Name	Animals At start	Administration (Weeks)													
		70	71	72	73	74	75	76	77	78	79	80	81	82	83
Control	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
250 ppm	50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	46/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	92.0
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0
4000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		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(%)															

(HAN360)

BAIS4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104
 SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 15

Group Name	Animals At start	Administration (Weeks)													
		84	85	86	87	88	89	90	91	92	93	94	95	96	97
Control	50	49/50	49/50	48/50	48/50	48/50	48/50	47/50	47/50	47/50	47/50	47/50	47/50	46/50	46/50
		98.0	98.0	96.0	96.0	96.0	96.0	94.0	94.0	94.0	94.0	94.0	94.0	92.0	92.0
250 ppm	50	46/50	46/50	46/50	46/50	46/50	46/50	44/50	44/50	44/50	44/50	44/50	44/50	43/50	43/50
		92.0	92.0	92.0	92.0	92.0	92.0	88.0	88.0	88.0	88.0	88.0	88.0	86.0	86.0
1000 ppm	50	49/50	48/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	46/50	46/50	45/50	45/50
		98.0	96.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	92.0	92.0	90.0	90.0
4000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	48/50	48/50	48/50	47/50	47/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	96.0	96.0	96.0	94.0
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104
 SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 16

Group Name	Animals At start	Administration (Weeks)						
		98	99	100	101	102	103	104
Control	50	45/50	44/50	43/50	43/50	41/50	41/50	40/50
		90.0	88.0	86.0	86.0	82.0	82.0	80.0
250 ppm	50	43/50	43/50	43/50	43/50	43/50	43/50	43/50
		86.0	86.0	86.0	86.0	86.0	86.0	86.0
1000 ppm	50	45/50	45/50	45/50	45/50	45/50	45/50	45/50
		90.0	90.0	90.0	90.0	90.0	90.0	90.0
4000 ppm	50	47/50	46/50	46/50	46/50	45/50	44/50	43/50
		94.0	92.0	92.0	92.0	90.0	88.0	86.0
Number of survival/ Number of effective animals Survival rate(%)								

(HAN360)

BAIS4

TABLE B 1

CLINICAL OBSERVATION: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : AI 104

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	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	1	1	2	2	2	2	2	1
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 2

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	2	2	3	3	3	2	7	7	7	7
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 3

Clinical sign	Group Name	Administration Week-day			32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7											
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	7	7	7	7	7	7	7	7	7	7	7	7	6	6
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 4

Clinical sign	Group Name	Administration Week-day				46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7												
DEATH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	7	7	8		8	9	9	9	9	13	13	17	17	20	20
PILOERECTION	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 5

Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
DEATH	Control	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	21	21	21	21	21	21	18	18	19	19	22	22	22	22	22
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 6

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	2	2	2	2	3	3	3	3	3	3	3	3	3	3
	250 ppm	0	0	0	1	1	1	1	1	1	2	2	2	2	2
	1000 ppm	1	1	1	2	2	2	2	2	2	2	2	3	3	3
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	20	20	20	20	20	20	20	20	20	20	18	18	20	20
PILOERECTION	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 7

Clinical sign	Group Name	Administration Week-day		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7														
DEATH	Control	3	3	3	3	4	5	5	5	5	5	5	7	9	9		
	250 ppm	2	2	2	2	3	3	4	4	4	4	5	6	6	6	6	
	1000 ppm	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	
	4000 ppm	1	1	1	1	1	1	2	3	3	4	4	4	4	4	4	
MORIBUND SACRIFICE	Control	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
PARALYTIC GAIT	Control	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WASTING	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOILED	Control	0	0	1	1	1	0	0	0	0	0	1	1	0	0	0	
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	20	20	19	19	18	18	18	18	18	17	17	17	15	15	15	13
PILORECTION	Control	0	0	0	1	0	0	0	0	0	0	2	2	1	2	3	
	250 ppm	0	0	0	1	0	0	0	0	0	1	1	0	0	1	2	
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 8

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	9	9	10	10	10	10
	250 ppm	6	7	7	7	7	7
	1000 ppm	6	6	6	7	7	7
	4000 ppm	4	5	7	8	8	9
MORIBUND SACRIFICE	Control	3	3	3	3	3	3
	250 ppm	2	2	3	3	3	3
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	250 ppm	0	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	250 ppm	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	1	0	0	0	0
WASTING	Control	1	1	1	1	1	1
	250 ppm	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0
	250 ppm	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	12	12	11	10	10	9
PILOERECTION	Control	3	3	2	2	3	4
	250 ppm	2	2	0	0	0	1
	1000 ppm	0	0	0	0	1	1
	4000 ppm	1	0	0	0	0	1

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 9

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	14-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 10

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 11

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	2	2	2	2	2	2	3	3	3	3	4	4	4
	4000 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	3
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 12

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	1000 ppm	4	4	4	4	4	4	5	5	5	5	5	5	5	5
	4000 ppm	3	3	3	4	4	4	4	4	4	4	4	4	4	4
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 13

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1000 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	4000 ppm	4	5	5	5	5	5	5	5	5	5	5	5	5	5
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	1	1	1	1	1	0	1	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 14

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	2	3	3	4	4	4	4	5	5	5	5	5	5	5
	1000 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	4000 ppm	5	5	5	5	5	5	5	5	6	6	6	6	6	6
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 15

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	1	1	1	2	2
	250 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	2	3
	250 ppm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	1000 ppm	6	6	6	6	6	6	6	6	6	6	6	7	7	7
	4000 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 16

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
FROG BELLY	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1
	4000 ppm	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	2	2	1	1	1	1
	250 ppm	0	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1
CATARACT	Control	3	3	3	3	4	4
	250 ppm	5	6	6	6	6	6
	1000 ppm	7	7	7	7	7	7
	4000 ppm	6	6	6	6	6	7
CORNEAL OPACITY	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : AI 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 17

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	14-7
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 18

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
EXTERNAL MASS	Control	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 19

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 20

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
EXTERNAL MASS	Control	0	0	0	0	1	1	1	1	0	0	0	1	0	0
	250 ppm	0	1	1	1	1	1	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	2	2	2	2	1	1	1	2	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	1	1	1	1	1	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	1	1	1	1	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 21

Clinical sign	Group Name	Administration Week-day				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
EXTERNAL MASS	Control	0	0	0		0	0	1	1	1	1	2	2	2	2	2
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	1	1	1		1	1	1	1	1	1	2	2	2	2	2
	4000 ppm	1	1	1		1	1	1	1	1	1	1	2	2	2	2
INTERNAL MASS	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	1	1	1	1
M. EAR	Control	0	0	0		0	0	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 22

Clinical sign	Group Name	Administration Week-day															
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7		
EXTERNAL MASS	Control	1	2	4	6	4	4	4	4	4	4	4	4	3	5		
	250 ppm	1	2	2	1	2	3	3	3	3	6	6	6	6	8		
	1000 ppm	3	3	2	3	3	3	2	2	2	3	3	3	4	5		
	4000 ppm	2	2	2	3	3	2	2	2	2	2	2	3	2	2		
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
M. NOSE	Control	0	0	1	1	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	1	1	0	0	0	0	0	0	1	0	0	0	1		
	1000 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	1	1	0	0	0	0	0	0	1	0	0		
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1		
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 23

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
EXTERNAL MASS	Control	5	5	5	5	6	7	8	7	8	8	9	9	7	8
	250 ppm	8	8	8	8	6	6	5	5	7	8	8	10	11	11
	1000 ppm	5	5	5	5	5	6	6	6	6	6	6	6	6	7
	4000 ppm	3	4	5	5	7	7	6	6	6	6	6	6	7	7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	4000 ppm	0	0	0	0	0	0	1	0	0	0	0	1	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	1	1	0	1	0	0	0	0	0
	250 ppm	1	1	1	1	0	0	0	0	0	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	1	1	1	1	0	0	0	0	0	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 24

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
EXTERNAL MASS	Control	8	8	7	7	7	7
	250 ppm	11	11	12	14	14	14
	1000 ppm	8	8	9	9	9	10
	4000 ppm	7	7	7	6	6	5
INTERNAL MASS	Control	0	0	0	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	1	2	1	1	0	0
M. NOSE	Control	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0
	250 ppm	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. PERI EAR	Control	1	1	0	0	0	0
	250 ppm	1	1	1	1	1	1
	1000 ppm	1	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : AI 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 25

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	14-7
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 26

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 27

Clinical sign	Group Name	Administration Week-day				32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7												
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 28

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	2	2	2	2	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 29

Clinical sign	Group Name	Administration Week-day			60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7											
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 30

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR DORSUM	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	2
	250 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	1000 ppm	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	250 ppm	0	0	0	0	0	0	0	0	0	2	2	2	2	2
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M. HINDLIMB	Control	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	1	1	1	1	1	1	1	1	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 31

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. BREAST	Control	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	1000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	1000 ppm	1	1	1	1	1	2	2	3	3	3	3	3	3	3
	4000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	2	2	2	2	3	3	3	3	3	3	3	3	3	3
	250 ppm	2	2	2	2	2	2	1	1	2	2	2	2	4	4
	1000 ppm	2	2	2	2	2	2	2	2	3	3	3	3	3	3
	4000 ppm	1	2	2	2	2	2	2	2	2	2	2	2	3	3
M. POSTERIOR DORSUM	Control	2	2	2	2	2	2	2	2	2	3	3	3	2	2
	250 ppm	2	2	2	2	2	2	2	2	3	3	3	4	4	5
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 32

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. BREAST	Control	1	1	1	1	1	1
	250 ppm	1	2	2	3	3	3
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	1
M. ABDOMEN	Control	0	0	0	1	1	1
	250 ppm	0	0	1	1	1	1
	1000 ppm	4	4	5	5	5	5
	4000 ppm	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	3	3	3	3	3	3
	250 ppm	5	5	5	5	5	5
	1000 ppm	3	3	3	3	4	5
	4000 ppm	3	3	3	3	3	2
M. POSTERIOR DORSUM	Control	2	2	2	2	2	2
	250 ppm	5	5	5	5	5	5
	1000 ppm	1	1	1	1	1	1
	4000 ppm	1	1	1	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. SCROTUM	Control	0	1	1	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
ANEMIA	Control	0	0	0	1	1	1
	250 ppm	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 33

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	14-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : AI 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 34

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	43	50	50	50	50	50	50

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 35

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 36

Clinical sign	Group Name	Administration Week-day				46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7												
ULCER	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 37

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 38

Clinical sign	Group Name	Administration Week-day			74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		71-7	72-7	73-7											
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	49	49	49	49	49	49	49	49

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 39

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	1	1	1	1	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	0	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	1000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	1	0	0	1	1	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	49	49	49	49	49	49	48	47	47	46	46	46	46	46

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 40

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
ULCER	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	2	2
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	0	0
	4000 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	250 ppm	1	1	1	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	1
	250 ppm	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	2
	4000 ppm	0	0	0	0	0	1
RED URINE	Control	1	1	0	0	0	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	1	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	46	44	43	42	42	41

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 41

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	14-7
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	250 ppm	50	50	50	49	49	49	49	49	49	49	49	49	49	49
	1000 ppm	50	50	50	49	49	49	49	49	49	49	49	49	49	49
	4000 ppm	50	50	50	50	50	50	49	49	48	47	47	47	47	48

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 42

Clinical sign	Group Name	Administration Week-day			18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7											
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	49	49	49	50	50	50	50	50	50	50	49
	250 ppm	49	49	49	49	49	48	48	48	48	48	48	48	48	48
	1000 ppm	49	49	49	48	48	48	48	48	48	48	48	48	48	48
	4000 ppm	48	48	48	48	47	47	46	7	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 43

Clinical sign	Group Name	Administration Week-day		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	250 ppm	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
	1000 ppm	48	47	47	47	47	47	47	47	46	46	46	46	45	45	45	45
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 44

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	48	48	48	48	49	49	49	48	49	49
	250 ppm	48	47	47	47	47	47	48	48	48	48	48	48	48	48
	1000 ppm	45	45	45	45	45	44	43	43	43	43	43	43	43	43
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 45

Clinical sign	Group Name	Administration Week-day			60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7											
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	47	47	47	47	46	46	46	45	44
	250 ppm	48	48	48	48	48	47	47	47	47	47	48	47	47	46
	1000 ppm	43	43	43	43	43	42	42	42	42	41	41	41	41	41
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 46

Clinical sign	Group Name	Administration Week-day			74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		71-7	72-7	73-7											
SMALL STOOL	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	45	44	42	39	41	41	41	41	41	41	41	41	42	40
	250 ppm	46	44	43	43	42	41	41	40	40	37	37	37	37	36
	1000 ppm	40	40	40	39	39	39	40	40	40	39	39	38	37	36
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 47

Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
SMALL STOOL	Control	0	0	0	2	1	2	1	1	1	4	2	2	0	1
	250 ppm	0	1	1	1	0	1	1	1	1	1	0	0	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	3
	4000 ppm	0	0	0	0	0	2	1	0	1	1	1	1	1	2
OLIGO-STOOL	Control	0	0	0	3	2	1	0	1	1	2	1	3	1	1
	250 ppm	0	1	1	1	0	0	0	0	1	1	0	0	0	1
	1000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	2	1	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	40	40	39	36	35	32	34	35	34	30	31	28	28	27
	250 ppm	36	36	36	36	37	36	36	36	34	30	30	28	26	25
	1000 ppm	36	35	35	35	35	34	34	34	34	33	33	31	31	29
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

PAGE : 48

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
SMALL STOOL	Control	1	3	1	2	2	4
	250 ppm	1	1	0	0	0	1
	1000 ppm	0	1	1	2	2	3
	4000 ppm	2	4	3	2	2	2
OLIGO-STOOL	Control	1	1	1	2	2	2
	250 ppm	1	1	0	0	0	2
	1000 ppm	0	0	0	0	0	1
	4000 ppm	0	1	0	1	1	2
SUBNORMAL TEMP	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
NON REMARKABLE	Control	26	26	27	26	25	23
	250 ppm	25	24	23	21	21	21
	1000 ppm	29	28	27	25	26	25
	4000 ppm	0	0	0	0	0	0

(HAN190)

BAIS 4

TABLE B 2

CLINICAL OBSERVATION: FEMALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 49

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	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	5	6	6	6	8	9	11	11	11	11	11	13	14
	4000 ppm	0	5	9	10	10	18	22	25	25	25	25	25	32	32
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 50

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	2	2	2	0	2	3	3	3	4	4	4
	1000 ppm	14	14	14	15	15	17	17	20	20	20	19	19	19	19
	4000 ppm	32	32	32	36	36	36	36	36	36	36	36	37	37	37
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 51

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	4	4	4	4	4	4	4	4	4	4	3	3	3	3
	1000 ppm	19	21	21	22	22	23	23	23	23	23	23	23	25	25
	4000 ppm	37	36	36	36	36	37	37	37	37	39	38	38	38	38
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 52

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	3	4	4	8	7	7	7	7	7	7	7	8	8	8
	1000 ppm	25	23	23	24	24	26	30	31	32	33	33	35	35	36
	4000 ppm	38	38	38	38	38	40	40	40	40	41	41	44	44	46
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 53

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	8	8	8	8	8	8	8	8	8	8	8	9	9	9
	1000 ppm	36	36	36	36	36	36	36	36	36	36	36	36	36	36
	4000 ppm	46	46	46	47	47	47	47	47	47	47	47	48	48	48
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 54

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	2	3	3
	1000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	9	7	7	7	6	6	6	6	6	4	4	3	3	3
	1000 ppm	36	35	35	35	32	32	32	31	31	31	31	29	29	29
	4000 ppm	48	47	46	46	46	46	46	46	46	46	46	45	45	45
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	3	3	3
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 55

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
DEATH	Control	1	1	1	1	1	2	2	2	2	2	2	2	2	3
	250 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	1000 ppm	2	3	3	3	3	3	3	3	3	4	4	4	4	4
	4000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	1	1	1	1	1	1	1	1	1	1	2	2	2
	250 ppm	1	1	1	1	1	3	3	3	3	3	3	4	4	4
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	4000 ppm	0	0	0	0	0	0	0	1	1	1	1	2	2	2
LOCOMOTOR MOVEMENT DECR	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	3	3	3	3	3	3	3	3	3	2	2	2	2	2
	1000 ppm	29	25	25	25	25	24	23	23	23	21	18	16	16	16
	4000 ppm	45	45	45	45	45	43	43	42	41	40	39	37	37	37
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	2	2	2	0
	250 ppm	0	0	0	0	1	0	0	0	0	1	1	0	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	1
LOSS OF HAIR	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 56

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	4	5	5	5	5	5
	250 ppm	3	3	3	3	3	3
	1000 ppm	4	4	4	4	4	4
	4000 ppm	1	1	1	2	3	4
MORIBUND SACRIFICE	Control	2	2	2	4	4	5
	250 ppm	4	4	4	4	4	4
	1000 ppm	1	1	1	1	1	1
	4000 ppm	3	3	3	3	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	1	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	2
	4000 ppm	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
EXCITEMENT	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
COLORED	Control	0	0	0	0	0	0
	250 ppm	2	2	2	2	2	2
	1000 ppm	16	16	15	13	13	11
	4000 ppm	36	36	36	33	32	29
PILOERECTION	Control	2	2	2	0	0	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	4
	4000 ppm	1	1	1	1	1	2
LOSS OF HAIR	Control	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	3	3	3	3	3	3
FROG BELLY	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 57

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	14-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 58

Clinical sign	Group Name	Administration Week-day			18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7											
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 59

Clinical sign	Group Name	Administration Week-day			32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7											
SOILED PERI-GENITALIA	Control	0	0	0	0	0	1	1	1	1	1	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 60

Clinical sign	Group Name	Administration Week-day			46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7											
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	2	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 61

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
SOILED PERI-GENITALIA	Control	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	0	0	0	0	0	0	0	0	0	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	1	1	1	2	2	2	2	2	2	3	3	4	4
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	3
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	1	1	0	0	0	0	0	0	0	0	0	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 62

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	1	1	1	1	1	1	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	1000 ppm	3	3	4	4	4	4	4	4	5	5	6	6	6	6
	4000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	3	3	4	4	4	4	4	4	5	5	5	5	5	5
	250 ppm	3	3	3	3	4	5	5	5	5	5	5	5	5	4
	1000 ppm	0	0	1	2	2	2	2	2	2	2	2	2	3	3
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	2	2	2	2	2	1	2	3	3	2	2	2
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 63

Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
SOILED PERI-GENITALIA	Control	0	1	1	1	1	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	2	1
	250 ppm	0	0	0	0	0	0	0	1	1	1	1	1	2	2
	1000 ppm	6	6	6	6	6	6	6	6	6	5	5	5	5	5
	4000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	6	6	6	6	6	6	7	7	8	8	8	8	8	7
	250 ppm	4	4	4	4	5	7	7	7	7	9	9	10	11	11
	1000 ppm	3	3	3	3	4	3	3	3	3	3	4	4	5	5
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	0	0	0	0	0	0	0	0	0	1	0	0	2
	250 ppm	0	1	1	1	1	0	0	1	1	1	1	0	0	0
	1000 ppm	2	1	1	1	2	2	2	2	2	2	2	2	2	2
	4000 ppm	0	0	0	0	0	0	1	0	0	0	1	0	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 64

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
SOILED PERI-GENITALIA	Control	0	2	2	0	0	0
	250 ppm	1	0	0	0	0	0
	1000 ppm	0	0	1	1	1	1
	4000 ppm	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1
	250 ppm	2	2	2	2	2	2
	1000 ppm	5	5	5	5	5	5
	4000 ppm	1	1	1	1	1	1
CORNEAL OPACITY	Control	1	2	2	2	2	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	7	8	8	9	9	11
	250 ppm	11	11	11	12	15	15
	1000 ppm	5	5	5	7	9	9
	4000 ppm	0	0	0	0	0	2
INTERNAL MASS	Control	3	1	1	0	0	0
	250 ppm	0	0	0	0	1	1
	1000 ppm	2	2	2	2	2	2
	4000 ppm	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	1
M. PERI-MOUTH	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	1
	4000 ppm	0	0	0	0	0	0
M. PERI EAR	Control	1	1	1	1	1	1
	250 ppm	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 65

Clinical sign	Group Name	Administration Week-day				4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1-7	2-7	3-7												
M. NECK	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 66

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 67

Clinical sign	Group Name	Administration Week-day				32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7												
M. NECK	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 68

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 69

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	1	1	1	1	1	1	2	2	2	2
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	3
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 70

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	2	2	2	2	2	2	2	2	3	3	3	3	3	3
	250 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	1	2	2	2	2	2	2	2	2	2	2	2
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 71

Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	250 ppm	3	3	3	3	3	4	4	5	5	5	5	5	5	5
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	250 ppm	0	0	0	0	1	1	1	1	1	2	2	2	2	2
	1000 ppm	2	2	2	2	3	2	2	2	2	2	2	2	2	2
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	1	1	0	0	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	1	0	0	0	0	0	0	0	1	0	1	0	1	1
	250 ppm	0	0	0	0	1	0	0	1	1	1	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. NECK	Control	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. BREAST	Control	4	4	4	4	4	4
	250 ppm	5	5	5	5	8	8
	1000 ppm	1	1	1	1	2	2
	4000 ppm	0	0	0	0	0	0
M. ABDOMEN	Control	0	1	1	2	2	3
	250 ppm	2	4	4	4	4	4
	1000 ppm	2	2	2	3	4	4
	4000 ppm	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
M. INTERSCAPULUM	Control	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	250 ppm	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	2
	250 ppm	1	0	0	1	1	1
	1000 ppm	1	1	1	2	2	2
	4000 ppm	0	0	0	0	0	1
ANEMIA	Control	1	1	1	1	1	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 73

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	14-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 74

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 75

Clinical sign	Group Name	Administration Week-day			32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7											
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 76

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 77

Clinical sign	Group Name	Administration Week-day			60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7											
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 78

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 79

Clinical sign	Group Name	Administration Week-day				88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7												
ULCER	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	1		1	1	1	1	1	1	1	1	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	1	1	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0		1	1	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0		0	0	0	0	0	0	0	1	0	0	0
	250 ppm	0	0	0		0	1	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	1	1	1	1	2	1	1	1	2	2
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	1	1
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	1	0	0		0	0	0	0	0	0	0	1	0	0	0
	250 ppm	0	0	0		0	0	0	0	0	0	1	1	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 80

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
ULCER	Control	0	0	0	1	1	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	1	1	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	1	1	1	0	0	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	2	2	2	2	2	3
	4000 ppm	0	0	0	1	0	0
RESPIRATORY SOUND ABNOR	Control	1	1	1	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
DEEP BREATHING	Control	0	1	1	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	1	1	1	1	0
	4000 ppm	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	1	0	0	0
	4000 ppm	0	0	0	0	0	0
YELLOW URINE	Control	2	1	1	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 81

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	14-7
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	250 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1000 ppm	50	45	44	44	44	42	41	39	39	39	39	39	37	36
	4000 ppm	50	45	41	40	40	32	28	25	25	25	25	25	18	18

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : AI 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 82

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	34	34	34	37	46	46	46
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	250 ppm	50	50	50	48	48	48	50	48	47	47	47	46	46	46
	1000 ppm	36	36	36	35	35	33	33	30	30	30	31	31	31	31
	4000 ppm	18	18	18	14	14	14	14	5	5	5	4	1	1	1

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 83

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	49	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	49	49	49	48	49	50	50	50	50
	250 ppm	46	46	46	46	45	45	45	45	45	45	46	46	46	46
	1000 ppm	31	29	29	28	28	27	27	27	27	27	27	27	25	25
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 84

Clinical sign	Group Name	Administration Week-day			46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7											
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	49	49	49	49	49	49	49	49	49	49	49	49
	250 ppm	45	44	42	39	40	40	40	40	40	40	40	39	39	39
	1000 ppm	25	27	27	26	26	24	20	19	18	17	17	14	14	13
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 85

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	48	47	48	47	47	47	47	47	46	44	44	43	43
	250 ppm	39	39	39	39	39	39	39	39	39	39	39	38	37	36
	1000 ppm	13	13	12	12	12	12	12	12	12	12	12	12	12	12
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 86

Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	1000 ppm	0	0	0	0	0	0	1	0	0	0	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
NON REMARKABLE	Control	44	44	43	43	43	42	42	42	41	41	41	42	41	41
	250 ppm	36	38	38	38	38	37	37	37	37	39	39	39	38	39
	1000 ppm	12	13	13	13	15	15	15	15	14	14	14	16	15	15
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 87

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	50	50	50	50	50	50	50	49	48	48	48	47	47	47
SMALL STOOL	Control	1	0	0	0	0	0	0	0	0	1	2	1	1	0
	250 ppm	0	0	0	0	2	0	0	0	1	1	2	2	2	2
	1000 ppm	1	0	0	0	1	2	2	2	3	2	3	2	2	2
	4000 ppm	0	0	0	0	0	1	1	0	0	0	1	1	2	3
OLIGO-STOOL	Control	1	0	0	0	0	0	0	0	2	1	1	0	0	1
	250 ppm	0	0	0	0	1	0	0	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	1	2	2	3	2	1	1	2	2
	4000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	1	2
NON REMARKABLE	Control	40	38	38	38	38	38	37	37	35	35	35	35	34	31
	250 ppm	39	38	38	38	36	34	34	32	32	31	31	30	28	28
	1000 ppm	14	16	16	16	16	17	17	17	17	19	21	21	21	21
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 88

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
BROWN URINE	Control	0	0	0	0	0	0
	250 ppm	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	4000 ppm	46	46	46	45	44	43
SMALL STOOL	Control	3	2	2	0	2	2
	250 ppm	1	1	2	2	2	2
	1000 ppm	2	2	3	3	3	6
	4000 ppm	2	2	2	2	1	1
OLIGO-STOOL	Control	3	2	2	0	1	1
	250 ppm	0	0	0	0	0	0
	1000 ppm	1	1	2	2	2	3
	4000 ppm	2	2	2	2	2	1
NON REMARKABLE	Control	30	30	30	29	29	26
	250 ppm	28	28	28	27	23	23
	1000 ppm	21	21	20	19	17	16
	4000 ppm	0	0	0	0	0	0

(HAN190)

BAIS 4

TABLE C 1

BODY WEIGHT CHANGES AND
SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 1

Week on Study	Control			250 ppm			1000 ppm			4000 ppm		
	Av. Wt.	No. of Surviv. <50>		Av. Wt.	% of cont. <50>	No. of Surviv.	Av. Wt.	% of cont. <50>	No. of Surviv.	Av. Wt.	% of cont. <50>	No. of Surviv.
0	121 (50)	50/50		121 (50)	100	50/50	121 (50)	100	50/50	121 (50)	100	50/50
1	152 (50)	50/50		150 (50)	99	50/50	150 (50)	99	50/50	143 (50)	94	50/50
2	184 (50)	50/50		181 (50)	98	50/50	179 (50)	97	50/50	172 (50)	93	50/50
3	210 (50)	50/50		206 (50)	98	50/50	203 (50)	97	50/50	195 (50)	93	50/50
4	230 (50)	50/50		225 (50)	98	50/50	223 (50)	97	50/50	213 (50)	93	50/50
5	245 (50)	50/50		241 (50)	98	50/50	239 (50)	98	50/50	227 (50)	93	50/50
6	259 (50)	50/50		255 (50)	98	50/50	253 (50)	98	50/50	239 (50)	92	50/50
7	274 (50)	50/50		269 (50)	98	50/50	267 (50)	97	50/50	251 (50)	92	50/50
8	287 (50)	50/50		281 (50)	98	50/50	279 (50)	97	50/50	262 (50)	91	50/50
9	296 (50)	50/50		291 (50)	98	50/50	289 (50)	98	50/50	272 (50)	92	50/50
10	303 (50)	50/50		297 (50)	98	50/50	297 (50)	98	50/50	280 (50)	92	50/50
11	309 (50)	50/50		303 (50)	98	50/50	302 (50)	98	50/50	285 (50)	92	50/50
12	316 (50)	50/50		312 (50)	99	50/50	310 (50)	98	50/50	292 (50)	92	50/50
13	323 (50)	50/50		319 (50)	99	50/50	317 (50)	98	50/50	298 (50)	92	50/50
14	329 (50)	50/50		326 (50)	99	50/50	324 (50)	98	50/50	304 (50)	92	50/50
18	346 (50)	50/50		342 (50)	99	50/50	341 (50)	99	50/50	319 (50)	92	50/50
22	363 (50)	50/50		357 (50)	98	50/50	357 (50)	98	50/50	333 (50)	92	50/50
26	378 (50)	50/50		371 (50)	98	50/50	372 (50)	98	50/50	346 (50)	92	50/50
30	387 (50)	50/50		382 (50)	99	50/50	382 (50)	99	50/50	356 (50)	92	50/50
34	400 (50)	50/50		392 (50)	98	50/50	393 (50)	98	50/50	365 (50)	91	50/50
38	408 (50)	50/50		400 (50)	98	50/50	401 (50)	98	50/50	371 (50)	91	50/50
42	414 (50)	50/50		406 (50)	98	50/50	408 (50)	99	50/50	379 (50)	92	50/50
46	422 (50)	50/50		413 (50)	98	50/50	417 (50)	99	50/50	386 (50)	91	50/50
50	427 (50)	50/50		418 (50)	98	50/50	423 (50)	99	50/50	390 (50)	91	50/50
54	430 (50)	50/50		423 (50)	98	50/50	427 (50)	99	50/50	394 (50)	92	50/50
58	433 (50)	50/50		428 (50)	99	50/50	432 (50)	100	50/50	398 (50)	92	50/50
62	433 (49)	49/50		428 (50)	99	50/50	431 (50)	100	50/50	400 (50)	92	50/50
66	435 (49)	49/50		430 (50)	99	50/50	434 (49)	100	49/50	402 (50)	92	50/50
70	432 (48)	48/50		432 (50)	100	50/50	436 (49)	101	49/50	404 (50)	94	50/50
74	437 (47)	47/50		437 (49)	100	49/50	441 (48)	101	48/50	407 (50)	93	50/50
78	440 (46)	46/50		438 (49)	100	49/50	442 (48)	100	48/50	407 (49)	93	49/50
82	439 (46)	46/50		440 (48)	100	48/50	443 (47)	101	47/50	406 (49)	92	49/50
86	433 (46)	46/50		435 (48)	100	48/50	437 (47)	101	47/50	399 (49)	92	49/50
90	426 (43)	43/50		432 (47)	101	47/50	431 (46)	101	46/50	391 (49)	92	49/50
94	415 (43)	43/50		426 (44)	103	44/50	426 (46)	103	46/50	385 (46)	93	46/50
98	408 (38)	38/50		418 (42)	102	42/50	417 (45)	102	45/50	375 (46)	92	46/50
102	399 (37)	37/50		416 (40)	104	40/50	407 (43)	102	43/50	366 (42)	92	42/50
104	390 (37)	37/50		407 (40)	104	40/50	400 (43)	103	43/50	360 (41)	92	41/50

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

TABLE C 2

BODY WEIGHT CHANGES AND
SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 2

Week on Study	Control		250 ppm		No. of Surviv.	1000 ppm		No. of Surviv.	4000 ppm		No. of Surviv.
	Av. Wt.	No. of Surviv. <50>	Av. Wt.	% of cont. <50>		Av. Wt.	% of cont. <50>		Av. Wt.	% of cont. <50>	
0	101 (50)	50/50	101 (50)	100	50/50	101 (50)	100	50/50	101 (50)	100	50/50
1	115 (50)	50/50	114 (50)	99	50/50	113 (50)	98	50/50	110 (50)	96	50/50
2	127 (50)	50/50	126 (50)	99	50/50	124 (50)	98	50/50	121 (50)	95	50/50
3	138 (50)	50/50	134 (50)	97	50/50	131 (50)	95	50/50	129 (50)	93	50/50
4	146 (50)	50/50	142 (50)	97	50/50	139 (50)	95	50/50	135 (50)	92	50/50
5	153 (50)	50/50	149 (50)	97	50/50	146 (50)	95	50/50	141 (50)	92	50/50
6	159 (50)	50/50	155 (50)	97	50/50	152 (50)	96	50/50	146 (50)	92	50/50
7	164 (50)	50/50	159 (50)	97	50/50	156 (50)	95	50/50	150 (50)	91	50/50
8	168 (50)	50/50	163 (50)	97	50/50	159 (50)	95	50/50	154 (50)	92	50/50
9	172 (50)	50/50	166 (50)	97	50/50	162 (50)	94	50/50	156 (50)	91	50/50
10	175 (50)	50/50	170 (50)	97	50/50	166 (50)	95	50/50	159 (50)	91	50/50
11	178 (50)	50/50	172 (50)	97	50/50	167 (50)	94	50/50	161 (50)	90	50/50
12	182 (50)	50/50	175 (50)	96	50/50	171 (50)	94	50/50	163 (50)	90	50/50
13	185 (50)	50/50	177 (50)	96	50/50	174 (50)	94	50/50	165 (50)	89	50/50
14	186 (50)	50/50	180 (50)	97	50/50	175 (50)	94	50/50	167 (50)	90	50/50
18	194 (50)	50/50	187 (50)	96	50/50	183 (50)	94	50/50	174 (50)	90	50/50
22	200 (50)	50/50	193 (50)	97	50/50	187 (50)	94	50/50	177 (50)	89	50/50
26	206 (50)	50/50	198 (50)	96	50/50	193 (50)	94	50/50	181 (50)	88	50/50
30	211 (50)	50/50	203 (50)	96	50/50	197 (50)	93	50/50	185 (50)	88	50/50
34	219 (50)	50/50	209 (49)	95	49/50	203 (50)	93	50/50	189 (50)	86	50/50
38	224 (50)	50/50	213 (49)	95	49/50	206 (50)	92	50/50	192 (50)	86	50/50
42	228 (50)	50/50	217 (49)	95	49/50	210 (50)	92	50/50	196 (50)	86	50/50
46	233 (50)	50/50	222 (48)	95	48/50	214 (50)	92	50/50	198 (50)	85	50/50
50	237 (50)	50/50	226 (48)	95	48/50	218 (50)	92	50/50	201 (50)	85	50/50
54	243 (50)	50/50	231 (48)	95	48/50	224 (50)	92	50/50	205 (50)	84	50/50
58	251 (49)	49/50	237 (48)	94	48/50	229 (50)	91	50/50	210 (50)	84	50/50
62	257 (49)	49/50	241 (48)	94	48/50	235 (50)	91	50/50	213 (50)	83	50/50
66	267 (49)	49/50	250 (48)	94	48/50	243 (50)	91	50/50	220 (50)	82	50/50
70	273 (49)	49/50	255 (48)	93	48/50	249 (50)	91	50/50	224 (50)	82	50/50
74	281 (49)	49/50	263 (48)	94	48/50	257 (50)	91	50/50	229 (50)	81	50/50
78	289 (49)	49/50	273 (48)	94	48/50	265 (49)	92	49/50	235 (50)	81	50/50
82	294 (49)	49/50	277 (47)	94	47/50	270 (49)	92	49/50	240 (50)	82	50/50
86	295 (48)	48/50	278 (46)	94	46/50	275 (47)	93	47/50	242 (50)	82	50/50
90	296 (47)	47/50	282 (44)	95	44/50	275 (47)	93	47/50	243 (50)	82	50/50
94	297 (47)	47/50	283 (44)	95	44/50	276 (46)	93	46/50	243 (48)	82	48/50
98	297 (45)	45/50	284 (43)	96	43/50	277 (45)	93	45/50	242 (47)	81	47/50
102	296 (41)	41/50	285 (43)	96	43/50	273 (45)	92	45/50	242 (45)	82	45/50
104	294 (40)	40/50	285 (43)	97	43/50	269 (45)	91	45/50	243 (43)	83	43/50

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

Av. Wt. : g

TABLE C 3

BODY WEIGHT CHANGES: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week		1		2		3		4		5		6	
	0													
Control	121±	6	152±	8	184±	10	210±	11	230±	11	245±	12	259±	14
250 ppm	121±	6	150±	8	181±	7	206±	8	225±	8	241±	8	255±	9
1000 ppm	121±	6	150±	8	179±	9**	203±	9**	223±	9**	239±	10*	253±	10*
4000 ppm	121±	6	143±	7**	172±	9**	195±	9**	213±	9**	227±	10**	239±	11**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week		7		8		9		10		11		12		13	
Control	274±	15	287±	17	296±	18	303±	18	309±	18	316±	18	323±	19		
250 ppm	269±	10	281±	11	291±	11	297±	13	303±	13	312±	14	319±	14		
1000 ppm	267±	10*	279±	11*	289±	13	297±	13	302±	12*	310±	13	317±	13		
4000 ppm	251±	11**	262±	12**	272±	13**	280±	12**	285±	13**	292±	13**	298±	14**		

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week		14		18		22		26		30		34		38	
Control	329±	19	346±	20	363±	19	378±	21	387±	21	400±	22	408±	22		
250 ppm	326±	14	342±	15	357±	17	371±	17	382±	19	392±	20	400±	20		
1000 ppm	324±	14	341±	14	357±	15	372±	16	382±	17	393±	17	401±	18		
4000 ppm	304±	14**	319±	15**	333±	17**	346±	16**	356±	17**	365±	19**	371±	19**		

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

Test of Dunnett

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week											
	42		46		50		54		58		62	
Control	414±	22	422±	22	427±	22	430±	23	433±	23	433±	23
250 ppm	406±	21	413±	21	418±	22	423±	23	428±	23	428±	24
1000 ppm	408±	19	417±	19	423±	20	427±	20	432±	20	431±	21
4000 ppm	379±	19**	386±	20**	390±	20**	394±	21**	398±	21**	400±	21**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week											
	70		74		78		82		86		90	
Control	432±	34	437±	28	440±	26	439±	25	433±	26	426±	31
250 ppm	432±	25	437±	25	438±	26	440±	27	435±	30	432±	36
1000 ppm	436±	20	441±	22	442±	24	443±	23	437±	23	431±	23
4000 ppm	404±	22**	407±	22**	407±	23**	406±	23**	399±	22**	391±	24**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week					
	98		102		104	
Control	408±	38	399±	37	390±	42
250 ppm	418±	37	416±	24*	407±	25
1000 ppm	417±	29	407±	34	400±	37
4000 ppm	375±	37**	366±	27**	360±	31**

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE C 4

BODY WEIGHT CHANGES: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week		1		2		3		4		5		6	
	0													
Control	101±	3	115±	4	127±	5	138±	5	146±	7	153±	6	159±	8
250 ppm	101±	3	114±	4	126±	5	134±	6**	142±	6**	149±	7**	155±	8*
1000 ppm	101±	3	113±	4*	124±	5**	131±	6**	139±	7**	146±	8**	152±	8**
4000 ppm	101±	3	110±	3**	121±	5**	129±	5**	135±	6**	141±	6**	146±	7**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 8

Group Name	Administration week											
	7	8	8	9	9	10	10	11	11	12	12	13
Control	164± 8	168± 8	172± 9	175± 9	178± 9	182± 10	185± 11					
250 ppm	159± 8**	163± 8**	166± 10**	170± 10*	172± 10**	175± 10**	177± 10**					
1000 ppm	156± 10**	159± 10**	162± 11**	166± 11**	167± 12**	171± 12**	174± 12**					
4000 ppm	150± 6**	154± 7**	156± 8**	159± 9**	161± 8**	163± 9**	165± 9**					

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 9

Group Name	Administration week											
	14		18		22		26		30		34	
Control	186± 11		194± 11		200± 13		206± 12		211± 14		219± 14	
250 ppm	180± 11*		187± 12**		193± 12**		198± 12**		203± 13**		209± 13**	
1000 ppm	175± 12**		183± 12**		187± 14**		193± 16**		197± 16**		203± 17**	
4000 ppm	167± 9**		174± 9**		177± 9**		181± 10**		185± 10**		189± 11**	

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration		week											
	42		46		50		54		58		62		66	
Control	228 ±	16	233 ±	18	237 ±	18	243 ±	19	251 ±	22	257 ±	23	267 ±	24
250 ppm	217 ±	15**	222 ±	16*	226 ±	16**	231 ±	17**	237 ±	18**	241 ±	20**	250 ±	21**
1000 ppm	210 ±	20**	214 ±	22**	218 ±	23**	224 ±	25**	229 ±	26**	235 ±	26**	243 ±	27**
4000 ppm	196 ±	12**	198 ±	12**	201 ±	13**	205 ±	13**	210 ±	15**	213 ±	16**	220 ±	18**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 11

Group Name	Administration week											
	70		74		78		82		86		90	
Control	273±	24	281±	24	289±	26	294±	26	295±	26	296±	25
250 ppm	255±	21**	263±	20**	273±	20**	277±	21**	278±	24**	282±	23*
1000 ppm	249±	26**	257±	27**	265±	28**	270±	29**	275±	29**	275±	32**
4000 ppm	224±	20**	229±	20**	235±	20**	240±	20**	242±	19**	243±	19**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 12

Group Name	Administration week					
	98		102		104	
Control	297±	28	296±	28	294±	29
250 ppm	284±	26	285±	24	285±	26
1000 ppm	277±	31**	273±	35**	269±	38**
4000 ppm	242±	26**	242±	27**	243±	23**

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

Test of Dunnett

TABLE D 1

FOOD CONSUMPTION CHANGES AND
SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

PAGE : 1

Week on Study	Control			250 ppm			1000 ppm			4000 ppm		
	Av. FC.	No. of Surviv. <50>		Av. FC.	% of cont. <50>	No. of Surviv.	Av. FC.	% of cont. <50>	No. of Surviv.	Av. FC.	% of cont. <50>	No. of Surviv.
1	13.0 (50)	50/50		12.9 (50)	99	50/50	13.0 (50)	100	50/50	12.0 (50)	92	50/50
2	14.4 (50)	50/50		14.2 (50)	99	50/50	14.0 (50)	97	50/50	13.7 (50)	95	50/50
3	15.2 (50)	50/50		15.1 (50)	99	50/50	14.7 (50)	97	50/50	14.6 (50)	96	50/50
4	15.6 (50)	50/50		15.4 (50)	99	50/50	15.1 (50)	97	50/50	14.8 (50)	95	50/50
5	15.6 (50)	50/50		15.4 (50)	99	50/50	15.3 (50)	98	50/50	15.0 (50)	96	50/50
6	15.5 (50)	50/50		15.4 (50)	99	50/50	15.4 (50)	99	50/50	15.2 (50)	98	50/50
7	15.6 (50)	50/50		15.5 (50)	99	50/50	15.5 (50)	99	50/50	15.3 (50)	98	50/50
8	15.8 (50)	50/50		15.7 (50)	99	50/50	15.5 (50)	98	50/50	15.3 (50)	97	50/50
9	15.8 (50)	50/50		15.7 (50)	99	50/50	15.6 (50)	99	50/50	15.2 (50)	96	50/50
10	15.9 (50)	50/50		15.7 (50)	99	50/50	15.7 (50)	99	50/50	15.2 (50)	96	50/50
11	15.6 (50)	50/50		15.5 (50)	99	50/50	15.5 (50)	99	50/50	14.9 (50)	96	50/50
12	15.4 (50)	50/50		15.6 (50)	101	50/50	15.7 (50)	102	50/50	14.8 (50)	96	50/50
13	15.7 (50)	50/50		15.3 (50)	97	50/50	15.4 (50)	98	50/50	14.6 (50)	93	50/50
14	15.6 (49)	50/50		15.6 (50)	100	50/50	15.6 (50)	100	50/50	14.9 (50)	96	50/50
18	15.9 (50)	50/50		15.6 (50)	98	50/50	15.5 (50)	97	50/50	14.8 (50)	93	50/50
22	16.2 (50)	50/50		15.9 (50)	98	50/50	15.9 (50)	98	50/50	15.0 (50)	93	50/50
26	16.1 (48)	50/50		16.1 (50)	100	50/50	16.0 (50)	99	50/50	15.2 (50)	94	50/50
30	15.9 (50)	50/50		15.6 (50)	98	50/50	15.5 (50)	97	50/50	15.0 (50)	94	50/50
34	16.1 (49)	50/50		16.0 (50)	99	50/50	15.9 (50)	99	50/50	15.1 (50)	94	50/50
38	16.3 (47)	50/50		16.1 (50)	99	50/50	16.1 (49)	99	50/50	15.3 (50)	94	50/50
42	16.7 (50)	50/50		16.1 (50)	96	50/50	16.3 (50)	98	50/50	15.7 (50)	94	50/50
46	16.5 (50)	50/50		16.1 (50)	98	50/50	16.3 (50)	99	50/50	15.7 (50)	95	50/50
50	16.7 (50)	50/50		16.3 (50)	98	50/50	16.5 (50)	99	50/50	15.7 (50)	94	50/50
54	16.3 (50)	50/50		16.2 (50)	99	50/50	16.4 (50)	101	50/50	15.7 (50)	96	50/50
58	15.8 (50)	50/50		15.8 (50)	100	50/50	16.0 (50)	101	50/50	15.3 (50)	97	50/50
62	16.0 (49)	49/50		15.7 (50)	98	50/50	15.6 (50)	98	50/50	15.4 (50)	96	50/50
66	16.3 (49)	49/50		16.2 (50)	99	50/50	16.2 (49)	99	49/50	15.8 (50)	97	50/50
70	15.9 (48)	48/50		16.3 (50)	103	50/50	16.2 (49)	102	49/50	15.7 (50)	99	50/50
74	16.1 (47)	47/50		16.3 (49)	101	49/50	16.1 (48)	100	48/50	15.6 (50)	97	50/50
78	16.3 (46)	46/50		16.4 (49)	101	49/50	16.0 (48)	98	48/50	15.5 (49)	95	49/50
82	15.8 (46)	46/50		15.9 (48)	101	48/50	15.7 (47)	99	47/50	15.0 (49)	95	49/50
86	15.9 (46)	46/50		15.7 (48)	99	48/50	15.4 (47)	97	47/50	14.9 (49)	94	49/50
90	16.0 (43)	43/50		16.0 (47)	100	47/50	15.6 (46)	98	46/50	14.8 (49)	93	49/50
94	15.6 (43)	43/50		15.6 (44)	100	44/50	15.6 (46)	100	46/50	15.1 (46)	97	46/50
98	16.0 (37)	38/50		15.7 (42)	98	42/50	15.7 (45)	98	45/50	14.8 (43)	93	46/50
102	15.9 (37)	37/50		16.1 (40)	101	40/50	16.1 (43)	101	43/50	15.5 (41)	97	42/50
104	15.6 (37)	37/50		15.3 (40)	98	40/50	15.3 (41)	98	43/50	14.6 (37)	94	41/50

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

TABLE D 2

FOOD CONSUMPTION CHANGES AND
SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

PAGE : 2

Week on Study	Control		250 ppm		No. of Surviv.	1000 ppm		No. of Surviv.	4000 ppm		No. of Surviv.
	Av. FC.	No. of Surviv. <50>	Av. FC.	% of cont. <50>		Av. FC.	% of cont. <50>		Av. FC.	% of cont. <50>	
1	10.5 (50)	50/50	10.3 (50)	98	50/50	10.1 (50)	96	50/50	9.4 (50)	90	50/50
2	10.5 (50)	50/50	10.5 (50)	100	50/50	10.2 (50)	97	50/50	9.6 (50)	91	50/50
3	10.8 (50)	50/50	10.8 (50)	100	50/50	10.5 (50)	97	50/50	10.0 (50)	93	50/50
4	11.1 (50)	50/50	10.8 (50)	97	50/50	10.8 (50)	97	50/50	10.2 (50)	92	50/50
5	10.9 (50)	50/50	10.7 (50)	98	50/50	10.6 (50)	97	50/50	9.9 (49)	91	50/50
6	11.0 (50)	50/50	10.8 (50)	98	50/50	10.6 (50)	96	50/50	10.2 (50)	93	50/50
7	10.6 (50)	50/50	10.6 (50)	100	50/50	10.3 (50)	97	50/50	9.9 (50)	93	50/50
8	10.7 (50)	50/50	10.6 (50)	99	50/50	10.1 (50)	94	50/50	9.8 (50)	92	50/50
9	10.8 (50)	50/50	10.6 (50)	98	50/50	10.2 (50)	94	50/50	9.7 (50)	90	50/50
10	10.9 (50)	50/50	10.7 (50)	98	50/50	10.4 (50)	95	50/50	9.8 (50)	90	50/50
11	11.0 (50)	50/50	10.8 (50)	98	50/50	10.3 (50)	94	50/50	9.8 (50)	89	50/50
12	11.3 (50)	50/50	11.1 (50)	98	50/50	10.8 (50)	96	50/50	10.0 (50)	88	50/50
13	11.2 (50)	50/50	10.8 (50)	96	50/50	10.6 (50)	95	50/50	10.0 (50)	89	50/50
14	11.5 (50)	50/50	11.3 (50)	98	50/50	10.7 (50)	93	50/50	10.2 (50)	89	50/50
18	11.7 (50)	50/50	11.4 (50)	97	50/50	11.2 (50)	96	50/50	10.6 (50)	91	50/50
22	12.2 (50)	50/50	12.0 (50)	98	50/50	11.6 (50)	95	50/50	11.1 (49)	91	50/50
26	12.1 (49)	50/50	12.1 (50)	100	50/50	11.8 (50)	98	50/50	11.0 (50)	91	50/50
30	12.3 (50)	50/50	11.8 (50)	96	50/50	11.6 (50)	94	50/50	10.8 (50)	88	50/50
34	12.4 (50)	50/50	12.1 (49)	98	49/50	11.6 (50)	94	50/50	10.9 (50)	88	50/50
38	12.9 (50)	50/50	12.3 (49)	95	49/50	11.7 (50)	91	50/50	11.0 (50)	85	50/50
42	12.5 (50)	50/50	12.4 (49)	99	49/50	12.1 (50)	97	50/50	11.1 (50)	89	50/50
46	13.1 (50)	50/50	12.8 (48)	98	48/50	12.1 (50)	92	50/50	11.5 (50)	88	50/50
50	13.4 (50)	50/50	13.0 (48)	97	48/50	12.4 (50)	93	50/50	12.1 (50)	90	50/50
54	13.8 (50)	50/50	13.4 (48)	97	48/50	12.8 (50)	93	50/50	12.4 (50)	90	50/50
58	13.4 (49)	49/50	13.1 (48)	98	48/50	12.5 (50)	93	50/50	12.1 (50)	90	50/50
62	13.6 (49)	49/50	12.9 (48)	95	48/50	12.7 (50)	93	50/50	12.3 (50)	90	50/50
66	14.3 (49)	49/50	13.6 (48)	95	48/50	13.1 (50)	92	50/50	13.1 (50)	92	50/50
70	13.8 (49)	49/50	13.3 (48)	96	48/50	13.1 (50)	95	50/50	12.9 (50)	93	50/50
74	14.3 (49)	49/50	13.7 (48)	96	48/50	13.4 (50)	94	50/50	13.3 (50)	93	50/50
78	14.6 (49)	49/50	14.2 (48)	97	48/50	13.4 (49)	92	49/50	13.3 (50)	91	50/50
82	13.8 (49)	49/50	13.8 (47)	100	47/50	13.3 (49)	96	49/50	13.2 (50)	96	50/50
86	14.3 (48)	48/50	13.8 (46)	97	46/50	13.6 (47)	95	47/50	13.7 (50)	96	50/50
90	14.0 (47)	47/50	13.5 (44)	96	44/50	13.3 (47)	95	47/50	13.5 (50)	96	50/50
94	13.7 (46)	47/50	13.8 (44)	101	44/50	13.0 (45)	95	46/50	13.2 (46)	96	48/50
98	14.1 (45)	45/50	13.9 (43)	99	43/50	13.3 (45)	94	45/50	13.2 (47)	94	47/50
102	14.0 (41)	41/50	14.0 (43)	100	43/50	13.0 (45)	93	45/50	13.7 (43)	98	45/50
104	13.7 (40)	40/50	14.2 (43)	104	43/50	12.7 (45)	93	45/50	14.0 (43)	102	43/50

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

TABLE D 3

FOOD CONSUMPTION CHANGES: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	1	2	3	4	5	6	7
Control	13.0± 0.7	14.4± 0.9	15.2± 0.8	15.6± 0.9	15.6± 1.1	15.5± 1.1	15.6± 1.2
250 ppm	12.9± 0.6	14.2± 0.6	15.1± 0.7	15.4± 0.7	15.4± 0.9	15.4± 0.8	15.5± 0.7
1000 ppm	13.0± 0.7	14.0± 0.8*	14.7± 0.8**	15.1± 0.8*	15.3± 0.9	15.4± 1.0	15.5± 1.0
4000 ppm	12.0± 0.7**	13.7± 0.8**	14.6± 0.9**	14.8± 0.8**	15.0± 1.0**	15.2± 1.0	15.3± 1.0

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

Test of Dunnett

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week													
	8		9		10		11		12		13		14	
Control	15.8±	1.3	15.8±	1.3	15.9±	1.3	15.6±	1.4	15.4±	1.4	15.7±	1.4	15.6±	1.2
250 ppm	15.7±	0.9	15.7±	0.8	15.7±	0.8	15.5±	0.9	15.6±	1.0	15.3±	1.0	15.6±	1.0
1000 ppm	15.5±	1.0	15.6±	1.1	15.7±	1.1	15.5±	1.0	15.7±	1.0	15.4±	1.0	15.6±	1.0
4000 ppm	15.3±	1.1	15.2±	1.1	15.2±	1.1*	14.9±	1.1**	14.8±	1.0*	14.6±	0.9**	14.9±	1.0**

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

Test of Dunnett

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week						
	18	22	26	30	34	38	42
Control	15.9± 1.4	16.2± 1.4	16.1± 1.3	15.9± 1.5	16.1± 1.2	16.3± 1.3	16.7± 1.5
250 ppm	15.6± 1.1	15.9± 1.0	16.1± 1.1	15.6± 1.1	16.0± 1.2	16.1± 1.2	16.1± 1.2
1000 ppm	15.5± 1.1	15.9± 1.2	16.0± 1.2	15.5± 1.1	15.9± 1.1	16.1± 1.3	16.3± 1.2
4000 ppm	14.8± 1.1**	15.0± 1.1**	15.2± 1.1**	15.0± 1.1**	15.1± 1.1**	15.3± 1.1**	15.7± 1.1**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week						
	46	50	54	58	62	66	70
Control	16.5± 1.3	16.7± 1.2	16.3± 1.4	15.8± 1.2	16.0± 1.3	16.3± 1.3	15.9± 2.4
250 ppm	16.1± 1.1	16.3± 1.2	16.2± 1.2	15.8± 1.1	15.7± 1.1	16.2± 1.2	16.3± 1.1
1000 ppm	16.3± 1.2	16.5± 1.4	16.4± 1.2	16.0± 1.2	15.6± 1.6	16.2± 1.2	16.2± 1.1
4000 ppm	15.7± 1.1**	15.7± 1.0**	15.7± 1.0*	15.3± 1.1	15.4± 1.0	15.8± 1.1	15.7± 1.2

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	74	78	82	86	90	94	98
Control	16.1± 1.6	16.3± 1.3	15.8± 1.4	15.9± 1.7	16.0± 1.6	15.6± 1.7	16.0± 1.4
250 ppm	16.3± 1.1	16.4± 1.3	15.9± 1.0	15.7± 1.6	16.0± 1.2	15.6± 1.7	15.7± 1.3
1000 ppm	16.1± 1.0	16.0± 1.2	15.7± 1.0	15.4± 1.6	15.6± 1.1	15.6± 1.4	15.7± 1.5
4000 ppm	15.6± 1.1*	15.5± 1.4*	15.0± 1.1**	14.9± 1.6*	14.8± 2.2**	15.1± 1.7	14.8± 1.4**

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

Test of Dunnett

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week	
	102	104
Control	15.9± 1.8	15.6± 2.7
250 ppm	16.1± 1.3	15.3± 1.1
1000 ppm	16.1± 1.6	15.3± 1.7
4000 ppm	15.5± 1.9	14.6± 2.0*

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE D 4

FOOD CONSUMPTION CHANGES: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week						
	1	2	3	4	5	6	7
Control	10.5± 0.6	10.5± 0.6	10.8± 0.9	11.1± 1.2	10.9± 1.0	11.0± 1.0	10.6± 1.0
250 ppm	10.3± 0.5	10.5± 0.7	10.8± 1.0	10.8± 0.7	10.7± 0.8	10.8± 0.9	10.6± 1.0
1000 ppm	10.1± 0.5**	10.2± 0.7	10.5± 1.3*	10.8± 0.8	10.6± 0.7	10.6± 0.7	10.3± 0.8
4000 ppm	9.4± 0.7**	9.6± 0.6**	10.0± 0.7**	10.2± 1.1**	9.9± 0.8**	10.2± 0.8**	9.9± 0.7**

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

Test of Dunnett

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	8	9	10	11	12	13	14
Control	10.7± 0.9	10.8± 0.9	10.9± 1.1	11.0± 1.1	11.3± 1.1	11.2± 1.2	11.5± 1.3
250 ppm	10.6± 1.0	10.6± 1.1	10.7± 1.2	10.8± 1.1	11.1± 1.5	10.8± 1.1	11.3± 1.4
1000 ppm	10.1± 0.8**	10.2± 0.7**	10.4± 0.8*	10.3± 0.8**	10.8± 0.8*	10.6± 0.8*	10.7± 1.0**
4000 ppm	9.8± 0.7**	9.7± 0.8**	9.8± 0.8**	9.8± 0.8**	10.0± 0.8**	10.0± 0.9**	10.2± 0.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration week						
	18	22	26	30	34	38	42
Control	11.7± 1.1	12.2± 1.4	12.1± 1.3	12.3± 1.5	12.4± 1.4	12.9± 1.5	12.5± 1.2
250 ppm	11.4± 1.3	12.0± 1.6	12.1± 2.0	11.8± 1.8	12.1± 2.0	12.3± 1.9	12.4± 1.7
1000 ppm	11.2± 0.9	11.6± 1.3	11.8± 1.6	11.6± 1.5	11.6± 1.4**	11.7± 1.4**	12.1± 1.7
4000 ppm	10.6± 1.1**	11.1± 1.4**	11.0± 1.4**	10.8± 1.4**	10.9± 1.4**	11.0± 1.3**	11.1± 1.2**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 10

Group Name	Administration week						
	46	50	54	58	62	66	70
Control	13.1± 1.5	13.4± 1.4	13.8± 1.4	13.4± 1.6	13.6± 1.4	14.3± 1.5	13.8± 1.4
250 ppm	12.8± 1.9	13.0± 2.0	13.4± 2.0	13.1± 1.9	12.9± 1.4	13.6± 1.7	13.3± 1.5
1000 ppm	12.1± 1.7*	12.4± 1.8*	12.8± 1.9*	12.5± 1.8*	12.7± 1.4*	13.1± 1.6**	13.1± 1.4*
4000 ppm	11.5± 1.4**	12.1± 1.7**	12.4± 1.7**	12.1± 1.9**	12.3± 1.8**	13.1± 2.3**	12.9± 1.7**

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

Test of Dunnett

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration week													
	74		78		82		86		90		94		98	
Control	14.3±	1.4	14.6±	1.7	13.8±	1.7	14.3±	1.9	14.0±	1.6	13.7±	2.3	14.1±	2.3
250 ppm	13.7±	1.3*	14.2±	1.8	13.8±	1.9	13.8±	1.9	13.5±	1.6	13.8±	2.3	13.9±	1.6
1000 ppm	13.4±	1.7**	13.4±	1.7**	13.3±	1.7	13.6±	2.0	13.3±	2.2	13.0±	1.7	13.3±	2.6
4000 ppm	13.3±	1.9**	13.3±	2.0**	13.2±	2.1	13.7±	2.1	13.5±	2.4	13.2±	1.8	13.2±	2.4

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

Test of Dunnett

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week	
	102	104
Control	14.0± 1.9	13.7± 2.8
250 ppm	14.0± 1.9	14.2± 2.1
1000 ppm	13.0± 2.6	12.7± 3.0
4000 ppm	13.7± 2.3	14.0± 2.8

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE E 1

CHEMICAL INTAKE CHANGES: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/day
 REPORT TYPE : AI 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

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
250 ppm	22±	1	20±	1	18±	1	17±	1	16±	1	15±	1	14±	1
1000 ppm	87±	3	78±	2	73±	2	68±	3	64±	3	61±	3	58±	3
4000 ppm	336±	13	320±	7	299±	9	278±	9	264±	10	254±	10	245±	10

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/day
 REPORT TYPE : A1 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration (weeks)													
	8		9		10		11		12		13		14	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
250 ppm	14±	1	13±	1	13±	1	13±	1	12±	1	12±	1	12±	1
1000 ppm	56±	3	54±	3	53±	3	51±	3	51±	3	48±	2	48±	3
4000 ppm	234±	10	224±	10	217±	10	209±	9	203±	8	196±	8	196±	8

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/day
 REPORT TYPE : AI 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration (weeks)													
	18		22		26		30		34		38		42	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
250 ppm	11±	1	11±	1	11±	1	10±	1	10±	1	10±	1	10±	1
1000 ppm	45±	3	45±	3	43±	3	41±	3	40±	3	40±	3	40±	3
4000 ppm	186±	9	180±	8	176±	10	169±	10	165±	9	165±	10	165±	10

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/day
 REPORT TYPE : AI 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration (weeks)													
	46		50		54		58		62		66		70	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
250 ppm	10±	1	10±	1	10±	1	9±	1	9±	1	9±	1	9±	1
1000 ppm	39±	3	39±	3	38±	3	37±	3	36±	3	38±	3	37±	2
4000 ppm	163±	9	161±	8	159±	9	154±	11	154±	9	157±	9	155±	11

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/day
 REPORT TYPE : A1 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration (weeks)													
	74		78		82		86		90		94		98	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
250 ppm	9±	1	9±	1	9±	1	9±	1	9±	1	9±	1	9±	1
1000 ppm	36±	2	36±	3	36±	3	35±	4	36±	3	37±	4	38±	5
4000 ppm	154±	11	152±	13	148±	11	150±	16	151±	21	158±	18	160±	20

(HAN300)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : mg/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration (weeks)			
	102		104	
Control	0±	0	0±	0
250 ppm	10±	1	10±	1
1000 ppm	40±	6	39±	6
4000 ppm	169±	20	163±	19

(HAN300)

BAIS 4

TABLE E 2

CHEMICAL INTAKE CHANGES: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

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							
250 ppm	23± 1	21± 1	20± 2	19± 1	18± 1	17± 1	17± 1							
1000 ppm	89± 4	83± 4	80± 9	77± 4	73± 3	70± 3	66± 3							
4000 ppm	342± 22	318± 15	311± 18	303± 27	280± 16	278± 18	265± 15							

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/d a y
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration (weeks)													
	8	9	10	11	12	13	14							
Control	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0							
250 ppm	16± 1	16± 1	16± 1	16± 1	16± 2	15± 1	16± 2							
1000 ppm	64± 4	63± 3	63± 4	62± 4	63± 4	61± 3	61± 4							
4000 ppm	254± 14	250± 14	246± 14	245± 14	245± 14	243± 17	243± 14							

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/d a y
 REPORT TYPE : AI 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration (weeks)													
	18	22	26	30	34	38	42							
Control	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0							
250 ppm	15± 1	16± 2	15± 2	15± 2	14± 2	14± 2	14± 2							
1000 ppm	61± 4	62± 5	61± 6	59± 6	58± 5	57± 4	57± 6							
4000 ppm	243± 20	250± 24	244± 27	233± 25	230± 22	230± 23	226± 21							

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/d a y
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration (weeks)													
	46	50	54	58	62	66	70							
Control	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0							
250 ppm	14± 2	14± 2	14± 2	14± 2	13± 1	14± 1	13± 1							
1000 ppm	57± 5	57± 5	57± 7	55± 6	54± 5	54± 5	53± 5							
4000 ppm	232± 24	240± 28	241± 28	230± 27	231± 24	238± 33	230± 23							

(HAN300)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : mg/kg/d a y
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration (weeks)													
	74	78	82	86	90	94	98							
Control	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0	0± 0							
250 ppm	13± 1	13± 2	13± 2	12± 2	12± 1	12± 2	12± 1							
1000 ppm	52± 6	51± 6	49± 6	50± 8	49± 8	48± 8	48± 10							
4000 ppm	232± 31	227± 28	220± 28	227± 31	222± 36	219± 27	219± 36							

(HAN300)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
UNIT : mg/kg/day
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration (weeks)			
	102		104	
Control	0±	0	0±	0
250 ppm	12±	2	13±	2
1000 ppm	48±	10	47±	11
4000 ppm	230±	37	231±	41

(HAN300)

BAIS 4

TABLE F 1

HEMATOLOGY: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

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	36	7.76±	1.68	13.0±	2.7	37.4±	6.8	49.4±	6.9	17.0±	2.1	34.5±	1.7	966±	306
250 ppm	39	8.13±	1.50	13.6±	2.4	39.0±	6.1	48.4±	3.4	16.8±	1.0	34.8±	1.3	887±	267
1000 ppm	43	7.96±	1.45	13.1±	2.6	37.7±	6.2	47.7±	3.5*	16.4±	1.3	34.5±	2.0	958±	321
4000 ppm	41	7.68±	1.06	12.9±	1.7*	36.8±	4.3*	48.3±	3.1	16.7±	0.9	34.8±	2.0	837±	111**

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	RETICULOCYTE %		METHEMOGLOBIN %	
Control	36	4.5±	3.9	0.9±	0.3
250 ppm	39	3.9±	4.1	1.0±	0.4
1000 ppm	43	4.5±	4.7	1.2±	0.7**
4000 ppm	41	4.8±	6.7**	1.9±	0.6**

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
				NEUTRO		LYMPHO									
Control	36	8.75 ±	9.30	46 ±	11	47 ±	11	5 ±	1	1 ±	1	0 ±	1	1 ±	1
250 ppm	39	10.35 ±	21.57	48 ±	15	41 ±	14	5 ±	2	1 ±	1	0 ±	0	5 ±	18
1000 ppm	43	6.51 ±	1.92	49 ±	9	44 ±	9	5 ±	1	1 ±	1	0 ±	0	1 ±	1
4000 ppm	41	7.18 ±	2.05	46 ±	9	47 ±	9	5 ±	1	1 ±	1	0 ±	0	1 ±	0

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

TABLE F 2

HEMATOLOGY: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

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	39	7.98±	0.55	14.6±	1.0	40.1±	2.7	50.3±	2.1	18.3±	0.8	36.4±	0.5	748±	169
250 ppm	42	7.90±	0.46	14.5±	0.9	39.8±	2.3	50.4±	1.1	18.3±	0.5	36.4±	0.6	715±	118
1000 ppm	44	7.53±	1.00**	14.0±	2.2**	38.9±	6.0**	51.7±	2.2**	18.5±	1.1**	35.8±	2.1**	786±	147*
4000 ppm	43	6.82±	0.65**	13.1±	1.0**	36.7±	2.5**	54.0±	2.5**	19.2±	0.7**	35.6±	0.7**	635±	96**

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	RETICULOCYTE %		METHEMOGLOBIN %	
Control	39	2.4±	1.5	0.7±	0.1
250 ppm	42	2.4±	1.0	0.9±	0.1**
1000 ppm	44	3.7±	3.8**	1.2±	0.3**
4000 ppm	43	5.4±	2.8**	2.4±	0.6**

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 6

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
				NEUTRO		LYMPHO									
Control	39	3.03±	1.16	41±	9	51±	9	4±	1	2±	1	0±	0	1±	0
250 ppm	42	3.15±	1.27	40±	10	53±	10	4±	1	2±	1	0±	0	1±	1
1000 ppm	44	3.82±	2.00	39±	10	55±	10	4±	1	2±	1	0±	0	1±	1**
4000 ppm	43	14.20±	69.79	34±	9**	58±	12*	4±	1*	2±	1	0±	0	3±	15**

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

TABLE G 1

BIOCHEMISTRY: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

PAGE : 1

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	36	6.8±	0.5	2.9±	0.2	0.7±	0.1	0.20±	0.29	145±	22	189±	63	97±	70
250 ppm	39	6.8±	0.5	2.9±	0.3	0.7±	0.1	0.18±	0.12	143±	29	169±	45	88±	46
1000 ppm	43	6.8±	0.4	2.9±	0.2	0.8±	0.1	0.15±	0.04	149±	16	174±	47	103±	57
4000 ppm	41	7.0±	0.4	3.1±	0.2**	0.8±	0.1**	0.19±	0.08**	145±	14	154±	38**	138±	72**

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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST I U/l		ALT I U/l		LDH I U/l		ALP I U/l		G-GTP I U/l		CK I U/l	
Control	36	272±	99	104±	104	41±	28	129±	118	370±	401	6±	4	98±	48
250 ppm	39	241±	67	99±	55	42±	13	148±	143	311±	87	6±	3	97±	38
1000 ppm	43	245±	54	102±	36**	55±	28**	132±	37**	411±	100**	8±	4**	99±	36
4000 ppm	41	236±	57	106±	45*	49±	21**	127±	29**	412±	103**	8±	4	88±	14

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

PAGE : 3

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	36	18.6±	3.9	0.6±	0.1	141±	2	3.8±	0.3	106±	2	10.6±	0.3	4.2±	0.5
250 ppm	39	19.4±	8.0	0.6±	0.3	142±	2	3.9±	0.5	106±	2	10.6±	0.3	4.5±	1.2
1000 ppm	43	21.7±	19.5	0.6±	0.2	142±	1	3.8±	0.4	106±	1	10.7±	0.4	4.4±	2.2
4000 ppm	41	21.6±	4.6**	0.6±	0.1	142±	2	3.9±	0.3	106±	2	10.6±	0.3	4.0±	0.5

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

TABLE G 2

BIOCHEMISTRY: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 4

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	39	6.9±	0.4	3.5±	0.3	1.0±	0.1	0.12±	0.01	149±	18	133±	33	84±	54
250 ppm	42	6.9±	0.4	3.5±	0.2	1.1±	0.1	0.11±	0.01	145±	17	131±	21	71±	40
1000 ppm	44	7.0±	0.7	3.5±	0.5	1.0±	0.2	0.13±	0.03	140±	27	140±	47	74±	51
4000 ppm	43	7.3±	0.4**	3.8±	0.3**	1.1±	0.1*	0.15±	0.02**	145±	14	119±	23*	58±	32*

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST I U/l		ALT I U/l		LDH I U/l		ALP I U/l		G-GTP I U/l		CK I U/l	
Control	39	235±	61	121±	57	52±	21	140±	70	161±	38	2±	1	84±	28
250 ppm	42	229±	39	143±	95	71±	63*	152±	62	177±	46	2±	1	78±	13
1000 ppm	44	242±	80	159±	133	79±	61**	163±	103	250±	292	3±	3	85±	38
4000 ppm	43	210±	40**	133±	133	57±	35	212±	432	216±	121*	2±	1	104±	111

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 6

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	39	16.5±	2.0	0.5±	0.1	140±	1	3.6±	0.3	104±	2	10.7±	0.4	4.0±	0.5
250 ppm	42	16.6±	2.4	0.5±	0.0	141±	1	3.5±	0.3	104±	2	10.7±	0.4	3.9±	0.6
1000 ppm	44	18.6±	10.0	0.5±	0.1	141±	2	3.6±	0.5	104±	2	10.7±	0.6	4.0±	0.8
4000 ppm	43	17.8±	2.1**	0.5±	0.1	141±	2	3.7±	0.3	105±	2	10.7±	0.3	3.9±	0.6

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

Test of Dunnett

(HCL074)

BAIS 4

TABLE H 1

URINALYSIS: MALE

Urinalysis of male rats

In the 4000 ppm dosed group, ketone body and bilirubin could not be measured by urine test paper in all animals, because their urine were colored by metabolite of test substance.

Therefore, ketone body and bilirubin in 4000 ppm dosed group, could not be evaluated.

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE REPORT TYPE : A1

URINALYSIS

PAGE : 1

Group Name	NO. of Animals	pH							CHI	Protein						CHI	Glucose						CHI	Ketone body						CHI	Bilirubin				CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		—	±	+	2+	3+	4+		—	±	+	2+	3+	4+		—	±	+	2+	3+	4+		—	+	2+	3+	
Control	36	0	1	4	5	11	13	2		0	0	0	1	21	14		36	0	0	0	0	0		33	3	0	0	0	0		35	0	0	1	
250 ppm	40	0	0	2	12	11	13	2		0	0	0	0	23	17		40	0	0	0	0	0		35	5	0	0	0	0		40	0	0	0	
1000 ppm	43	0	0	0	2	13	24	4		0	0	0	0	30	13		43	0	0	0	0	0		40	3	0	0	0	0		43	0	0	0	
4000 ppm	42	0	0	2	5	12	18	5		0	0	0	3	34	5	*	42	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BATS 4

STUDY NO. : 0684

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

URINALYSIS

PAGE : 2

Group Name	NO. of Animals	Occult blood					Urobilinogen						
		—	±	+	2+	3+	CHI	±	+	2+	3+	4+	CHI
Control	36	36	0	0	0	0		36	0	0	0	0	
250 ppm	40	39	1	0	0	0		40	0	0	0	0	
1000 ppm	43	43	0	0	0	0		43	0	0	0	0	
4000 ppm	42	42	0	0	0	0		42	0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BATS 4

TABLE H 2

URINALYSIS: FEMALE

Urinalysis of female rats

In the 4000 ppm dosed group, ketone body and bilirubin could not be measured by urine test paper in all animals, because their urine were colored by metabolite of test substance.

Therefore, ketone body and bilirubin in 4000 ppm dosed group, could not be evaluated.

STUDY NO. : 0684

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	pH							CHI	Protein						CHI	Glucose						CHI	Ketone body						CHI	Bilirubin				CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	+	2+	3+	
Control	40	0	1	8	8	17	5	1		0	0	2	13	22	3		40	0	0	0	0	0		36	4	0	0	0	0		40	0	0	0	
250 ppm	43	0	0	2	6	18	13	4		0	0	2	17	24	0		43	0	0	0	0	0		38	5	0	0	0	0		43	0	0	0	
1000 ppm	45	0	2	4	6	15	16	2		0	0	3	17	23	2		45	0	0	0	0	0		40	5	0	0	0	0		45	0	0	0	
4000 ppm	44	0	2	6	7	16	12	1		0	2	7	20	15	0	*	44	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

URINALYSIS

PAGE : 4

Group Name	NO. of Animals	Occult blood					Urobilinogen						
		—	±	+	2+	3+	CHI	±	+	2+	3+	4+	CHI
Control	40	40	0	0	0	0	0	40	0	0	0	0	0
250 ppm	43	43	0	0	0	0	0	43	0	0	0	0	0
1000 ppm	45	44	0	0	0	0	1	45	0	0	0	0	0
4000 ppm	44	44	0	0	0	0	0	44	0	0	0	0	0

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

Test of CHI SQUARE

(HCL101)

BATS 4

TABLE I 1

GROSS FINDINGS: MALE: ALL ANIMALS

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		250 ppm		1000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		5	(10)	5	(10)	4	(8)	4	(8)
subcutis	mass		7	(14)	11	(22)	7	(14)	4	(8)
nasal cavit	white zone		0	(0)	1	(2)	1	(2)	0	(0)
lung	white zone		1	(2)	1	(2)	1	(2)	1	(2)
	nodule		0	(0)	0	(0)	2	(4)	0	(0)
lymph node	enlarged		4	(8)	1	(2)	1	(2)	1	(2)
spleen	enlarged		5	(10)	4	(8)	2	(4)	3	(6)
	nodule		0	(0)	1	(2)	1	(2)	4	(8)
	deformed		0	(0)	0	(0)	0	(0)	2	(4)
	granular		0	(0)	0	(0)	0	(0)	41	(82)
oral cavity	nodule		0	(0)	0	(0)	0	(0)	1	(2)
forestomach	nodule		0	(0)	1	(2)	0	(0)	1	(2)
	ulcer		2	(4)	2	(4)	0	(0)	0	(0)
gl stomach	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	erosion		1	(2)	0	(0)	1	(2)	1	(2)
stomach	rupture		1	(2)	0	(0)	0	(0)	0	(0)
liver	enlarged		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		2	(4)	0	(0)	0	(0)	2	(4)
	rough		1	(2)	0	(0)	0	(0)	0	(0)
	herniation		7	(14)	4	(8)	6	(12)	6	(12)
kidney	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	granular		4	(8)	4	(8)	3	(6)	3	(6)

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			50 (%)	50 (%)	50 (%)	50 (%)
urin bladd	red		0 (0)	0 (0)	1 (2)	0 (0)
	thick		1 (2)	0 (0)	0 (0)	1 (2)
	urine:marked retention		0 (0)	1 (2)	1 (2)	1 (2)
pituitary	enlarged		11 (22)	10 (20)	2 (4)	4 (8)
	red zone		6 (12)	8 (16)	5 (10)	4 (8)
	brown zone		0 (0)	1 (2)	0 (0)	0 (0)
	nodule		2 (4)	1 (2)	2 (4)	0 (0)
	cyst		1 (2)	1 (2)	0 (0)	1 (2)
thyroid	enlarged		3 (6)	3 (6)	3 (6)	2 (4)
	nodule		0 (0)	0 (0)	1 (2)	0 (0)
adrenal	enlarged		1 (2)	6 (12)	1 (2)	2 (4)
testis	nodule		28 (56)	33 (66)	39 (78)	41 (82)
brain	white zone		1 (2)	0 (0)	0 (0)	0 (0)
	red zone		0 (0)	0 (0)	1 (2)	0 (0)
	brown zone		1 (2)	0 (0)	0 (0)	0 (0)
spinal cord	nodule		1 (2)	0 (0)	0 (0)	0 (0)
eye	white		4 (8)	6 (12)	7 (14)	8 (16)
Harder gl	enlarged		1 (2)	0 (0)	0 (0)	0 (0)
Zymbal gl	nodule		0 (0)	2 (4)	0 (0)	0 (0)
bone	nodule		0 (0)	1 (2)	0 (0)	0 (0)
pleura	nodule		0 (0)	0 (0)	2 (4)	0 (0)
mediastinum	mass		0 (0)	1 (2)	1 (2)	0 (0)

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		250 ppm		1000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
peritoneum	mass		1	(2)	0	(0)	0	(0)	0	(0)
	thick		0	(0)	0	(0)	1	(2)	0	(0)
retroperit	mass		0	(0)	0	(0)	2	(4)	0	(0)
abdominal c	hemorrhage		0	(0)	0	(0)	0	(0)	2	(4)
	ascites		2	(4)	0	(0)	2	(4)	1	(2)
thoracic ca	pleural fluid		2	(4)	1	(2)	3	(6)	1	(2)
other	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	tail:nodule		0	(0)	0	(0)	1	(2)	0	(0)
	eye lid:nodule		1	(2)	0	(0)	0	(0)	0	(0)
	hindlimb:nodule		0	(0)	1	(2)	0	(0)	0	(0)
	nose:nodule		1	(2)	0	(0)	1	(2)	0	(0)

TABLE I 2

GROSS FINDINGS: MALE: DEAD AND MORIBUND ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			13 (%)	10 (%)	7 (%)	9 (%)
skin/app	nodule		0 (0)	1 (10)	0 (0)	1 (11)
subcutis	mass		1 (8)	1 (10)	0 (0)	1 (11)
lung	white zone		0 (0)	0 (0)	0 (0)	1 (11)
	nodule		0 (0)	0 (0)	1 (14)	0 (0)
lymph node	enlarged		4 (31)	0 (0)	0 (0)	0 (0)
spleen	enlarged		2 (15)	0 (0)	1 (14)	2 (22)
	nodule		0 (0)	0 (0)	0 (0)	2 (22)
	deformed		0 (0)	0 (0)	0 (0)	2 (22)
	granular		0 (0)	0 (0)	0 (0)	1 (11)
forestomach	nodule		0 (0)	0 (0)	0 (0)	1 (11)
	ulcer		1 (8)	2 (20)	0 (0)	0 (0)
gl stomach	erosion		0 (0)	0 (0)	0 (0)	1 (11)
stomach	rupture		1 (8)	0 (0)	0 (0)	0 (0)
liver	enlarged		1 (8)	0 (0)	0 (0)	0 (0)
	rough		1 (8)	0 (0)	0 (0)	0 (0)
	herniation		1 (8)	0 (0)	1 (14)	1 (11)
kidney	granular		1 (8)	2 (20)	0 (0)	1 (11)
urin bladd	red		0 (0)	0 (0)	1 (14)	0 (0)
	thick		0 (0)	0 (0)	0 (0)	1 (11)
	urine:marked retention		0 (0)	0 (0)	1 (14)	1 (11)
pituitary	enlarged		6 (46)	4 (40)	0 (0)	2 (22)
	red zone		2 (15)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			13 (%)	10 (%)	7 (%)	9 (%)
pituitary	nodule		1 (8)	0 (0)	0 (0)	0 (0)
thyroid	enlarged		0 (0)	1 (10)	0 (0)	0 (0)
adrenal	enlarged		1 (8)	1 (10)	1 (14)	1 (11)
testis	nodule		3 (23)	2 (20)	4 (57)	2 (22)
brain	red zone		0 (0)	0 (0)	1 (14)	0 (0)
	brown zone		1 (8)	0 (0)	0 (0)	0 (0)
spinal cord	nodule		1 (8)	0 (0)	0 (0)	0 (0)
eye	white		0 (0)	0 (0)	0 (0)	1 (11)
Harder gl	enlarged		1 (8)	0 (0)	0 (0)	0 (0)
Zymbal gl	nodule		0 (0)	1 (10)	0 (0)	0 (0)
bone	nodule		0 (0)	1 (10)	0 (0)	0 (0)
pleura	nodule		0 (0)	0 (0)	2 (29)	0 (0)
mediastinum	mass		0 (0)	1 (10)	1 (14)	0 (0)
peritoneum	mass		1 (8)	0 (0)	0 (0)	0 (0)
retroperit	mass		0 (0)	0 (0)	2 (29)	0 (0)
abdominal c	hemorrhage		0 (0)	0 (0)	0 (0)	2 (22)
	ascites		2 (15)	0 (0)	1 (14)	1 (11)
thoracic ca	pleural fluid		1 (8)	1 (10)	2 (29)	1 (11)
other	eye lid:nodule		1 (8)	0 (0)	0 (0)	0 (0)
	hindlimb:nodule		0 (0)	1 (10)	0 (0)	0 (0)

TABLE I 3

GROSS FINDINGS: MALE: SACRIFICED ANIMALS

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			37 (%)	40 (%)	43 (%)	41 (%)
skin/app	nodule		5 (14)	4 (10)	4 (9)	3 (7)
subcutis	mass		6 (16)	10 (25)	7 (16)	3 (7)
nasal cavit	white zone		0 (0)	1 (3)	1 (2)	0 (0)
lung	white zone		1 (3)	1 (3)	1 (2)	0 (0)
	nodule		0 (0)	0 (0)	1 (2)	0 (0)
lymph node	enlarged		0 (0)	1 (3)	1 (2)	1 (2)
spleen	enlarged		3 (8)	4 (10)	1 (2)	1 (2)
	nodule		0 (0)	1 (3)	1 (2)	2 (5)
	granular		0 (0)	0 (0)	0 (0)	40 (98)
oral cavity	nodule		0 (0)	0 (0)	0 (0)	1 (2)
forestomach	nodule		0 (0)	1 (3)	0 (0)	0 (0)
	ulcer		1 (3)	0 (0)	0 (0)	0 (0)
gl stomach	nodule		0 (0)	1 (3)	0 (0)	0 (0)
	erosion		1 (3)	0 (0)	1 (2)	0 (0)
liver	nodule		2 (5)	0 (0)	0 (0)	2 (5)
	herniation		6 (16)	4 (10)	5 (12)	5 (12)
kidney	nodule		0 (0)	1 (3)	0 (0)	0 (0)
	granular		3 (8)	2 (5)	3 (7)	2 (5)
urin bladd	thick		1 (3)	0 (0)	0 (0)	0 (0)
	urine:marked retention		0 (0)	1 (3)	0 (0)	0 (0)
pituitary	enlarged		5 (14)	6 (15)	2 (5)	2 (5)
	red zone		4 (11)	8 (20)	5 (12)	4 (10)

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			37 (%)	40 (%)	43 (%)	41 (%)
pituitary	brown zone		0 (0)	1 (3)	0 (0)	0 (0)
	nodule		1 (3)	1 (3)	2 (5)	0 (0)
	cyst		1 (3)	1 (3)	0 (0)	1 (2)
thyroid	enlarged		3 (8)	2 (5)	3 (7)	2 (5)
	nodule		0 (0)	0 (0)	1 (2)	0 (0)
adrenal	enlarged		0 (0)	5 (13)	0 (0)	1 (2)
testis	nodule		25 (68)	31 (78)	35 (81)	39 (95)
brain	white zone		1 (3)	0 (0)	0 (0)	0 (0)
eye	white		4 (11)	6 (15)	7 (16)	7 (17)
Zymbal gl	nodule		0 (0)	1 (3)	0 (0)	0 (0)
peritoneum	thick		0 (0)	0 (0)	1 (2)	0 (0)
abdominal c	ascites		0 (0)	0 (0)	1 (2)	0 (0)
thoracic ca	pleural fluid		1 (3)	0 (0)	1 (2)	0 (0)
other	nodule		0 (0)	0 (0)	1 (2)	0 (0)
	tail:nodule		0 (0)	0 (0)	1 (2)	0 (0)
	nose:nodule		1 (3)	0 (0)	1 (2)	0 (0)

TABLE I 4

GROSS FINDINGS: FEMALE: ALL ANIMALS

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		250 ppm		1000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		0	(0)	1	(2)	2	(4)	0	(0)
subcutis	jaundice		1	(2)	0	(0)	0	(0)	0	(0)
	mass		13	(26)	14	(28)	10	(20)	3	(6)
lung	white zone		1	(2)	0	(0)	1	(2)	2	(4)
	nodule		0	(0)	1	(2)	0	(0)	0	(0)
lymph node	enlarged		2	(4)	2	(4)	1	(2)	1	(2)
spleen	enlarged		3	(6)	2	(4)	0	(0)	4	(8)
	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	deformed		0	(0)	0	(0)	1	(2)	1	(2)
	granular		0	(0)	0	(0)	0	(0)	42	(84)
heart	white zone		1	(2)	0	(0)	0	(0)	0	(0)
forestomach	nodule		2	(4)	0	(0)	0	(0)	0	(0)
	ulcer		2	(4)	0	(0)	1	(2)	0	(0)
	thick		0	(0)	1	(2)	0	(0)	0	(0)
gl stomach	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	ulcer		1	(2)	0	(0)	0	(0)	0	(0)
small intes	nodule		0	(0)	1	(2)	0	(0)	0	(0)
rectum	thick		1	(2)	0	(0)	0	(0)	0	(0)
liver	white zone		2	(4)	0	(0)	0	(0)	1	(2)
	nodule		1	(2)	2	(4)	0	(0)	1	(2)
	cyst		0	(0)	1	(2)	1	(2)	0	(0)
	rough		1	(2)	0	(0)	0	(0)	0	(0)

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			50 (%)	50 (%)	50 (%)	50 (%)
liver	herniation		7 (14)	4 (8)	6 (12)	9 (18)
pancreas	nodule		0 (0)	0 (0)	0 (0)	1 (2)
kidney	nodule		1 (2)	0 (0)	0 (0)	0 (0)
	granular		1 (2)	1 (2)	2 (4)	0 (0)
	hydronephrosis		1 (2)	0 (0)	0 (0)	0 (0)
	dilated pelvis		0 (0)	0 (0)	0 (0)	1 (2)
	urine:marked retention		1 (2)	0 (0)	1 (2)	0 (0)
pituitary	enlarged		5 (10)	7 (14)	10 (20)	9 (18)
	red zone		10 (20)	14 (28)	16 (32)	14 (28)
	brown zone		1 (2)	0 (0)	0 (0)	1 (2)
	nodule		5 (10)	2 (4)	2 (4)	0 (0)
thyroid	enlarged		2 (4)	3 (6)	2 (4)	2 (4)
adrenal	enlarged		1 (2)	1 (2)	0 (0)	3 (6)
ovary	enlarged		1 (2)	1 (2)	0 (0)	0 (0)
	cyst		1 (2)	0 (0)	2 (4)	1 (2)
uterus	nodule		2 (4)	1 (2)	8 (16)	8 (16)
brain	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
	red zone		1 (2)	0 (0)	0 (0)	0 (0)
periph nerv	nodule		0 (0)	1 (2)	0 (0)	0 (0)
eye	turbid		1 (2)	0 (0)	0 (0)	0 (0)
	white		2 (4)	3 (6)	6 (12)	2 (4)
Harder gl	nodule		0 (0)	0 (0)	1 (2)	0 (0)

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Group Name NO. of Animals	Control		250 ppm		1000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
Zymbal gl	nodule		1	(2)	1	(2)	0	(0)	0	(0)
muscle	nodule		0	(0)	1	(2)	0	(0)	0	(0)
bone	nodule		0	(0)	0	(0)	1	(2)	0	(0)
pleura	nodule		0	(0)	0	(0)	2	(4)	0	(0)
mediastinum	mass		0	(0)	0	(0)	1	(2)	0	(0)
retroperit	mass		0	(0)	0	(0)	0	(0)	1	(2)
abdominal c	ascites		0	(0)	1	(2)	2	(4)	0	(0)
thoracic ca	hemorrhage		0	(0)	0	(0)	1	(2)	0	(0)
	pleural fluid		1	(2)	1	(2)	2	(4)	1	(2)
other	upper jaw:nodule		1	(2)	0	(0)	0	(0)	0	(0)
	nose:nodule		0	(0)	0	(0)	0	(0)	1	(2)
whole body	anemic		1	(2)	0	(0)	0	(0)	0	(0)

TABLE I 5

GROSS FINDINGS: FEMALE: DEAD AND MORIBUND ANIMALS

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			10 (%)	7 (%)	5 (%)	7 (%)
subcutis	jaundice		1 (10)	0 (0)	0 (0)	0 (0)
	mass		2 (20)	1 (14)	1 (20)	0 (0)
lung	white zone		1 (10)	0 (0)	0 (0)	1 (14)
	nodule		0 (0)	1 (14)	0 (0)	0 (0)
lymph node	enlarged		2 (20)	1 (14)	1 (20)	1 (14)
spleen	enlarged		3 (30)	1 (14)	0 (0)	2 (29)
	deformed		0 (0)	0 (0)	0 (0)	1 (14)
	granular		0 (0)	0 (0)	0 (0)	1 (14)
heart	white zone		1 (10)	0 (0)	0 (0)	0 (0)
forestomach	nodule		1 (10)	0 (0)	0 (0)	0 (0)
	ulcer		1 (10)	0 (0)	0 (0)	0 (0)
	thick		0 (0)	1 (14)	0 (0)	0 (0)
gl stomach	ulcer		1 (10)	0 (0)	0 (0)	0 (0)
liver	white zone		1 (10)	0 (0)	0 (0)	1 (14)
	nodule		1 (10)	1 (14)	0 (0)	1 (14)
	rough		1 (10)	0 (0)	0 (0)	0 (0)
	herniation		1 (10)	0 (0)	2 (40)	2 (29)
pancreas	nodule		0 (0)	0 (0)	0 (0)	1 (14)
kidney	granular		0 (0)	1 (14)	0 (0)	0 (0)
	hydronephrosis		1 (10)	0 (0)	0 (0)	0 (0)
	dilated pelvis		0 (0)	0 (0)	0 (0)	1 (14)
urin bladd	urine:marked retention		1 (10)	0 (0)	1 (20)	0 (0)

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			10 (%)	7 (%)	5 (%)	7 (%)
pituitary	enlarged		2 (20)	3 (43)	2 (40)	2 (29)
	red zone		3 (30)	0 (0)	1 (20)	1 (14)
	nodule		1 (10)	0 (0)	0 (0)	0 (0)
thyroid	enlarged		1 (10)	0 (0)	0 (0)	0 (0)
adrenal	enlarged		0 (0)	1 (14)	0 (0)	1 (14)
ovary	enlarged		1 (10)	0 (0)	0 (0)	0 (0)
	cyst		0 (0)	0 (0)	0 (0)	1 (14)
uterus	nodule		1 (10)	0 (0)	2 (40)	3 (43)
brain	enlarged		0 (0)	1 (14)	0 (0)	0 (0)
periph nerv	nodule		0 (0)	1 (14)	0 (0)	0 (0)
eye	white		1 (10)	1 (14)	1 (20)	1 (14)
muscle	nodule		0 (0)	1 (14)	0 (0)	0 (0)
pleura	nodule		0 (0)	0 (0)	1 (20)	0 (0)
mediastinum	mass		0 (0)	0 (0)	1 (20)	0 (0)
abdominal c	ascites		0 (0)	0 (0)	1 (20)	0 (0)
thoracic ca	hemorrhage		0 (0)	0 (0)	1 (20)	0 (0)
	pleural fluid		1 (10)	1 (14)	0 (0)	1 (14)
whole body	anemic		1 (10)	0 (0)	0 (0)	0 (0)

TABLE I 6

GROSS FINDINGS: FEMALE: SACRIFICED ANIMALS

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			40 (%)	43 (%)	45 (%)	43 (%)
skin/app	nodule		0 (0)	1 (2)	2 (4)	0 (0)
subcutis	mass		11 (28)	13 (30)	9 (20)	3 (7)
lung	white zone		0 (0)	0 (0)	1 (2)	1 (2)
lymph node	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
spleen	enlarged		0 (0)	1 (2)	0 (0)	2 (5)
	nodule		0 (0)	0 (0)	0 (0)	1 (2)
	deformed		0 (0)	0 (0)	1 (2)	0 (0)
	granular		0 (0)	0 (0)	0 (0)	41 (95)
forestomach	nodule		1 (3)	0 (0)	0 (0)	0 (0)
	ulcer		1 (3)	0 (0)	1 (2)	0 (0)
gl stomach	nodule		0 (0)	1 (2)	0 (0)	0 (0)
small intes	nodule		0 (0)	1 (2)	0 (0)	0 (0)
rectum	thick		1 (3)	0 (0)	0 (0)	0 (0)
liver	white zone		1 (3)	0 (0)	0 (0)	0 (0)
	nodule		0 (0)	1 (2)	0 (0)	0 (0)
	cyst		0 (0)	1 (2)	1 (2)	0 (0)
	herniation		6 (15)	4 (9)	4 (9)	7 (16)
kidney	nodule		1 (3)	0 (0)	0 (0)	0 (0)
	granular		1 (3)	0 (0)	2 (4)	0 (0)
pituitary	enlarged		3 (8)	4 (9)	8 (18)	7 (16)
	red zone		7 (18)	14 (33)	15 (33)	13 (30)
	brown zone		1 (3)	0 (0)	0 (0)	1 (2)

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control	250 ppm	1000 ppm	4000 ppm
			40 (%)	43 (%)	45 (%)	43 (%)
pituitary	nodule		4 (10)	2 (5)	2 (4)	0 (0)
thyroid	enlarged		1 (3)	3 (7)	2 (4)	2 (5)
adrenal	enlarged		1 (3)	0 (0)	0 (0)	2 (5)
ovary	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
	cyst		1 (3)	0 (0)	2 (4)	0 (0)
uterus	nodule		1 (3)	1 (2)	6 (13)	5 (12)
brain	red zone		1 (3)	0 (0)	0 (0)	0 (0)
eye	turbid		1 (3)	0 (0)	0 (0)	0 (0)
	white		1 (3)	2 (5)	5 (11)	1 (2)
Harder gl	nodule		0 (0)	0 (0)	1 (2)	0 (0)
Zymbal gl	nodule		1 (3)	1 (2)	0 (0)	0 (0)
bone	nodule		0 (0)	0 (0)	1 (2)	0 (0)
pleura	nodule		0 (0)	0 (0)	1 (2)	0 (0)
retroperit	mass		0 (0)	0 (0)	0 (0)	1 (2)
abdominal c	ascites		0 (0)	1 (2)	1 (2)	0 (0)
thoracic ca	pleural fluid		0 (0)	0 (0)	2 (4)	0 (0)
other	upper jaw:nodule		1 (3)	0 (0)	0 (0)	0 (0)
	nose:nodule		0 (0)	0 (0)	0 (0)	1 (2)

TABLE J 1

ORGAN WEIGHT, ABSOLUTE: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	36	374± 30	0.083± 0.013	3.112± 1.713	1.285± 0.120	1.464± 0.362	2.805± 0.243
250 ppm	39	387± 25	0.110± 0.107	2.984± 1.283	1.301± 0.088	1.513± 0.576	2.909± 0.318
1000 ppm	43	379± 38	0.082± 0.013	3.347± 1.466	1.258± 0.094	1.407± 0.080	2.985± 0.452*
4000 ppm	41	339± 30**	0.081± 0.073**	4.135± 1.858*	1.208± 0.100**	1.397± 0.113	3.118± 0.229**

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

Test of Dunnett

(ICL040)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	36	1.426±	1.501	11.140±	2.138	2.108±	0.045
250 ppm	39	1.823±	3.158	11.376±	1.987	2.119±	0.042
1000 ppm	43	1.252±	0.980	11.735±	1.254*	2.120±	0.052
4000 ppm	41	1.576±	0.456**	12.141±	1.295**	2.104±	0.041

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE J 2

ORGAN WEIGHT, ABSOLUTE: FEMALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	Body Weight		ADRENALS		OVARIES		HEART		LUNGS		KIDNEYS	
Control	39	282±	25	0.097±	0.074	0.156±	0.054	0.966±	0.064	1.023±	0.079	1.951±	0.145
250 ppm	42	270±	25	0.083±	0.013	0.317±	1.132	0.937±	0.079	0.968±	0.067**	1.872±	0.132*
1000 ppm	44	254±	39**	0.078±	0.009**	0.210±	0.368**	0.917±	0.096*	0.980±	0.108**	1.891±	0.169
4000 ppm	43	228±	23**	0.086±	0.064**	0.138±	0.020*	0.919±	0.077*	0.996±	0.144*	1.844±	0.137**

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	39	0.626±	0.143	7.168±	0.789	1.948±	0.043
250 ppm	42	0.634±	0.510	6.861±	0.891	1.930±	0.033
1000 ppm	44	0.682±	0.322	7.246±	1.237	1.935±	0.036
4000 ppm	43	1.541±	0.979**	8.173±	0.863**	1.936±	0.050

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE K 1

ORGAN WEIGHT, RELATIVE: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	36	374± 30	0.022± 0.004	0.838± 0.468	0.346± 0.047	0.398± 0.133	0.754± 0.086
250 ppm	39	387± 25	0.029± 0.028	0.769± 0.327	0.337± 0.029	0.392± 0.151	0.755± 0.098
1000 ppm	43	379± 38	0.022± 0.006	0.891± 0.389	0.336± 0.045	0.376± 0.047	0.808± 0.260
4000 ppm	41	339± 30**	0.025± 0.024	1.229± 0.559**	0.358± 0.034*	0.415± 0.046**	0.925± 0.083**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	36	0.405± 0.509	3.000± 0.684	0.567± 0.052
250 ppm	39	0.467± 0.796	2.940± 0.481	0.550± 0.037
1000 ppm	43	0.333± 0.270	3.119± 0.360**	0.566± 0.066
4000 ppm	41	0.466± 0.139**	3.588± 0.315**	0.626± 0.058**

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

(HCL042)

BAIS 4

TABLE K 2

ORGAN WEIGHT, RELATIVE: FEMALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	39	282± 25	0.034± 0.023	0.056± 0.021	0.345± 0.031	0.367± 0.055	0.697± 0.079
250 ppm	42	270± 25	0.031± 0.005	0.114± 0.390	0.349± 0.033	0.362± 0.038	0.699± 0.067
1000 ppm	44	254± 39**	0.032± 0.006	0.080± 0.126	0.370± 0.074	0.398± 0.108*	0.761± 0.137**
4000 ppm	43	228± 23**	0.038± 0.029	0.061± 0.009**	0.406± 0.045**	0.443± 0.090**	0.814± 0.064**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	39	0.226± 0.071	2.550± 0.258	0.697± 0.073
250 ppm	42	0.235± 0.184	2.553± 0.310	0.722± 0.070
1000 ppm	44	0.272± 0.144**	2.882± 0.469**	0.782± 0.134**
4000 ppm	43	0.684± 0.456**	3.606± 0.389**	0.858± 0.086**

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

(HCL042)

BAIS 4

TABLE L 1

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

MALE: ALL ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

		Group Name No. of Animals on Study	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50				
Organ_____	Findings_____	Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	
<hr/>																			
{Integumentary system/appandage}																			
skin/app			<50>				<50>				<50>				<50>				
	scar		1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	squamous cell hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
subcutis			<50>				<50>				<50>				<50>				
	hemorrhage		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	fibrosis:focal		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<hr/>																			
{Respiratory system}																			
nasal cavit			<50>				<50>				<50>				<50>				
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit	mineralization	32 (64)	0 (0)	0 (0)	0 (0)	38 (76)	0 (0)	0 (0)	0 (0)	36 (72)	0 (0)	0 (0)	0 (0)	33 (66)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium	29 (58)	6 (12)	4 (8)	0 (0)	16 (32)	9 (18)	0 (0)	0 (0)	13 (26)	9 (18)	2 (4)	0 (0)	12 (24)	15 (30)	10 (20)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammation:foreign body	18 (36)	11 (22)	1 (2)	0 (0)	16 (32)	9 (18)	3 (6)	0 (0)	14 (28)	8 (16)	2 (4)	0 (0)	13 (26)	7 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammation:respiratory epithelium	7 (14)	0 (0)	0 (0)	0 (0)	8 (16)	1 (2)	0 (0)	0 (0)	16 (32)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammation:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:gland	42 (84)	0 (0)	0 (0)	0 (0)	32 (64)	0 (0)	0 (0)	0 (0)	42 (84)	0 (0)	0 (0)	0 (0)	40 (80)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 3

Organ_____	Findings_____	Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Respiratory system}																		
nasal cavit		<50>					<50>				<50>				<50>			
	squamous cell metaplasia:respiratory epithelium	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx		<50>					<50>				<50>				<50>			
	inflammation:foreign body	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)
trachea		<50>					<50>				<50>				<50>			
	inflammation	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung		<50>					<50>				<50>				<50>			
	congestion	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	2	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
		(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)
	edema	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin	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)	(0)	(2)	(0)	(0)	(0)	(0)

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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<50>			
	inflammatory infiltration		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)	(6)	(0)	(0)	(0)
	accumulation of foamy cells		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchopneumonia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		5	1	0	0	3	0	0	0	2	0	1	0	1	0	0	0
			(10)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(2)	(0)	(2)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	hemorrhage		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin		2	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	granulation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(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																		

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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
bone marrow	increased hematopoiesis	<50>				<50>				<50>				<50>				<50>			
		8	1	0	0	8	3	0	0	5	3	0	0	14	1	0	0	14	1	0	0
		(16)	(2)	(0)	(0)	(16)	(6)	(0)	(0)	(10)	(6)	(0)	(0)	(28)	(2)	(0)	(0)	(28)	(2)	(0)	(0)
spleen	angiectasis	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	1	0	0	0	27	0	0	0	27	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(54)	(0)	(0)	(0)	(54)	(0)	(0)	(0)
	deposit of hemosiderin	<50>				<50>				<50>				<50>				<50>			
		16	1	0	0	21	4	0	0	27	1	0	0	28	2	0	0	28	2	0	0 *
		(32)	(2)	(0)	(0)	(42)	(8)	(0)	(0)	(54)	(2)	(0)	(0)	(56)	(4)	(0)	(0)	(56)	(4)	(0)	(0)
	fibrosis:focal	<50>				<50>				<50>				<50>				<50>			
		4	0	0	0	0	0	0	0	2	0	0	0	2	3	1	0	2	3	1	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(6)	(2)	(0)	(4)	(6)	(2)	(0)
	extramedullary hematopoiesis	<50>				<50>				<50>				<50>				<50>			
		26	5	1	0	26	8	5	0	34	6	3	0	31	13	3	0	31	13	3	0 **
		(52)	(10)	(2)	(0)	(52)	(16)	(10)	(0)	(68)	(12)	(6)	(0)	(62)	(26)	(6)	(0)	(62)	(26)	(6)	(0)
	engorgement of erythrocyte	<50>				<50>				<50>				<50>				<50>			
		1	0	0	0	1	0	0	0	0	0	0	0	17	0	0	0	17	0	0	0 **
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(34)	(0)	(0)	(0)
	capsule hyperplasia	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	43	0	0	0	43	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(86)	(0)	(0)	(0)	(86)	(0)	(0)	(0)
(Circulatory system)																					
heart	thrombus	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)

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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																					
heart	mineralization	<50>				0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	<50>				0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	inflammatory infiltration	<50>				0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis	<50>				36	4	0	0	31	3	0	0	29	5	0	0	35	2	0	0
		(72)	(8)	(0)	(0)	(62)	(6)	(0)	(0)	(58)	(10)	(0)	(0)	(70)	(4)	(0)	(0)	(70)	(4)	(0)	(0)
	subendocardial fibrosis	<50>				1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
artery/aort	mineralization:artery	<50>				0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
(Digestive system)																					
tooth	dysplasia	<50>				1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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ALL ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
tongue		<50>				<50>				<50>				<50>				<50>			
	arteritis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
salivary gl		<50>				<50>				<50>				<50>				<50>			
	lymphocytic infiltration	0	0	0	0	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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
stomach		<50>				<50>				<50>				<50>				<50>			
	erosion:forestomach	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach	0	1	1	1	2	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0
		(0)	(2)	(2)	(2)	(4)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia:forestomach	0	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	erosion:glandular stomach	1	0	0	0	5	0	0	0	6	0	0	0	4	0	0	0	4	0	0	0
		(2)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	ulcer:glandular stomach	2	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	4	2	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(4)	(0)	(0)	(8)	(4)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach		<50>				<50>				<50>				<50>				<50>			
	mineralization:glandular stomach	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated glands	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell hyperplasia:forestomach	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
small intes		<50>				<50>				<50>				<50>				<50>			
	erosion	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver		<50>				<50>				<50>				<50>				<50>			
	herniation	7	0	0	0	5	0	0	0	5	0	0	0	6	0	0	0	6	0	0	0
		(14)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	fatty change:peripheral	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(2)	(0)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	12	0	0	0	3	0	0	0 *	2	0	0	0 **	1	0	0	0 **	2	0	0	0
		(24)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver																					
	inflammatory cell nest	16	0	0	0	18	1	0	0	26	0	0	0	18	0	0	0	18	0	0	0
		(32)	(0)	(0)	(0)	(36)	(2)	(0)	(0)	(52)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	(36)	(0)	(0)	(0)
	extramedullary hematopoiesis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	clear cell focus	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
	acidophilic cell focus	9	1	0	0	4	3	0	0	14	2	2	0	6	5	1	0	6	5	1	0
		(18)	(2)	(0)	(0)	(8)	(6)	(0)	(0)	(28)	(4)	(4)	(0)	(12)	(10)	(2)	(0)	(12)	(10)	(2)	(0)
	basophilic cell focus	5	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	spongiosis hepatis	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	bile duct hyperplasia	43	1	0	0	42	0	0	0	48	1	0	0	29	0	0	0	29	0	0	0 **
		(86)	(2)	(0)	(0)	(84)	(0)	(0)	(0)	(96)	(2)	(0)	(0)	(58)	(0)	(0)	(0)	(58)	(0)	(0)	(0)
	bile ductular proliferation	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver	hepatocellular hypertrophy:central		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(38)	(0)	(0)	(0)
	hemorrhage:central		0	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)	(2)	(0)	(0)
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas	atrophy		<50>				<50>				<50>				<50>			
			4	0	0	0	6	1	0	0	6	0	1	0	4	1	0	0
			(8)	(0)	(0)	(0)	(12)	(2)	(0)	(0)	(12)	(0)	(2)	(0)	(8)	(2)	(0)	(0)
	islet cell hyperplasia		2	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	hyperplasia:acinar cell		1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
(Urinary system)																		
kidney	deposit of pigment		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(38)	(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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 11

Organ_____	Findings_____	Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<50>				<50>				<50>				<50>			
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scar	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	27	15	6	0	30	12	5	1	22	19	6	1	9	20	20	1	**
		(54)	(30)	(12)	(0)	(60)	(24)	(10)	(2)	(44)	(38)	(12)	(2)	(18)	(40)	(40)	(2)	
	papillary necrosis	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)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
mineralization:papilla	1	0	0	0	2	0	0	0	4	0	0	0	4	0	0	0	0	
	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	
mineralization:pelvis	2	0	0	0	3	1	0	0	0	0	0	0	24	2	0	0	**	
	(4)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(48)	(4)	(0)	(0)		
mineralization:cortex	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
urothelial hyperplasia:pelvis	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)	(0)	(6)	(0)	(0)	(0)	(0)	

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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																					
urin bladd		<50>				<50>				<50>				<50>				<50>			
	dilatation	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer	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)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	0	0	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)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	transitional cell hyperplasia	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Endocrine system)																					
pituitary		<50>				<50>				<50>				<50>				<50>			
	angiectasis	0	0	0	0	4	0	0	0	1	0	0	0	1	1	0	0	1	1	0	0
		(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
	cyst	1	0	0	0	5	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia	7	5	4	0	8	2	1	0	5	8	4	0	7	2	0	0	7	2	0	0
		(14)	(10)	(8)	(0)	(16)	(4)	(2)	(0)	(10)	(16)	(8)	(0)	(14)	(4)	(0)	(0)	(14)	(4)	(0)	(0)

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PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary	Rathke pouch		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
thyroid	follicular hyperplasia		<50>				<50>				<50>				<50>			
			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)	(2)	(0)	(0)	(0)
	C-cell hyperplasia		14	3	1	0	12	2	2	0	11	2	3	0	9	4	1	0
			(28)	(6)	(2)	(0)	(24)	(4)	(4)	(0)	(22)	(4)	(6)	(0)	(18)	(8)	(2)	(0)
adrenal	extramedullary hematopoiesis		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:cortical cell		0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
	hyperplasia:medulla		1	0	1	0	4	0	0	0	4	0	0	0	3	0	2	0
			(2)	(0)	(2)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(4)	(0)
	focal fatty change:cortex		2	0	0	0	2	0	0	0	2	1	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																		
testis	mineralization		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	interstitial cell hyperplasia		6	0	0	0	7	0	0	0	3	0	0	0	3	0	0	0
			(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
epididymis	inflammation		<50>				<50>				<50>				<50>			
			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)	(2)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
semin ves	inflammation		<50>				<50>				<50>				<50>			
			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)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
prostate	inflammation		<50>				<50>				<50>				<50>			
			2	1	0	0	4	0	0	0	2	2	0	0	0	0	1	0
			(4)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(0)	(0)	(2)	(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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
prostate		<50>				<50>				<50>				<50>				<50>			
	lymphocytic infiltration	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	hyperplasia	3 (6)	2 (4)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (8)	1 (2)	0 (0)	0 (0)	2 (4)	1 (2)	0 (0)	0 (0)
{Nervous system}																					
brain		<50>				<50>				<50>				<50>				<50>			
	mineralization	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	hyperplasia:chroid plexus	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	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}																					
eye		<50>				<50>				<50>				<50>				<50>			
	cataract	7 (14)	1 (2)	0 (0)	0 (0)	5 (10)	1 (2)	0 (0)	0 (0)	6 (12)	1 (2)	0 (0)	0 (0)	5 (10)	3 (6)	0 (0)	0 (0)	5 (10)	3 (6)	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

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 16

		Group Name No. of Animals on Study				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
(Special sense organs/appendage)																					
eye	retinal atrophy		<50>					<50>					<50>					<50>			
		18	3	1	0		2	4	5	0 **		1	3	6	0 **		3	6	5	0 **	
	(36)	(6)	(2)	(0)		(4)	(8)	(10)	(0)		(2)	(6)	(12)	(0)		(6)	(12)	(10)	(0)		
	keratitis	0	1	1	0		1	0	2	0		1	2	0	0		1	2	0	0	
		(0)	(2)	(2)	(0)		(2)	(0)	(4)	(0)		(2)	(4)	(0)	(0)		(2)	(4)	(0)	(0)	
iritis	0	0	0	0		1	0	0	0		0	0	0	0		1	1	0	0		
	(0)	(0)	(0)	(0)		(2)	(0)	(0)	(0)		(0)	(0)	(0)	(0)		(2)	(2)	(0)	(0)		
mineralization:cornea	1	0	0	0		2	0	0	0		1	0	0	0		3	1	0	0		
	(2)	(0)	(0)	(0)		(4)	(0)	(0)	(0)		(2)	(0)	(0)	(0)		(6)	(2)	(0)	(0)		
Harder gl	lymphocytic infiltration		<50>					<50>					<50>					<50>			
		2	0	0	0		3	0	0	0		4	0	0	0		4	0	0	0	
	(4)	(0)	(0)	(0)		(6)	(0)	(0)	(0)		(8)	(0)	(0)	(0)		(8)	(0)	(0)	(0)		
	hyperplasia	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)		(2)	(0)	(0)	(0)	
(Musculoskeletal system)																					
muscle	mineralization		<50>					<50>					<50>					<50>			
		0	0	0	0		1	0	0	0		0	0	0	0		0	0	0	0	
(0)	(0)	(0)	(0)		(2)	(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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)				(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Musculoskeletal system}

muscle		<50>				<50>				<50>				<50>			
lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

(HPT150)

BAIS4

TABLE L 2

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

MALE: DEAD AND MORIBUND ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<13>				<10>				< 7>				< 9>							
	scar	1	0	0	0	0	0	0	0	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)	(0)	(0)	(0)	(0)
subcutis		<13>				<10>				< 7>				< 9>							
	hemorrhage	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit		<13>				<10>				< 7>				< 9>							
	thrombus	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization	9	0	0	0	9	0	0	0	4	0	0	0	5	0	0	0	5	0	0	0
		(69)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(57)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium	8	0	0	0	3	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0 **
		(62)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(14)	(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<13>				<10>				< 7>				< 9>							
	inflammation:foreign body	2	4	0	0	5	1	0	0	4	0	0	0	2	1	0	0				
		(15)	(31)	(0)	(0)	(50)	(10)	(0)	(0)	(57)	(0)	(0)	(0)	(22)	(11)	(0)	(0)				
	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
	respiratory metaplasia:olfactory epithelium	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)				
	respiratory metaplasia:gland	12	0	0	0	5	0	0	0	6	0	0	0	6	0	0	0				
		(92)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(86)	(0)	(0)	(0)	(67)	(0)	(0)	(0)				
	squamous cell metaplasia:respiratory epithelium	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)				
trachea		<13>				<10>				< 7>				< 9>							
	inflammation	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)				
lung		<13>				<10>				< 7>				< 9>							
	congestion	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(14)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 3

		Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	13				10				7				9			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<13>				<10>				< 7>				< 9>			
	hemorrhage		2	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(15)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(11)	(0)	(0)
	edema		1	0	0	0	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)
	deposit of hemosiderin		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)	(11)	(0)	(0)	(0)	
	inflammatory infiltration		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)	(11)	(0)	(0)	(0)	
{Hematopoietic system}																		
bone marrow			<13>				<10>				< 7>				< 9>			
	deposit of hemosiderin		1	0	0	0	1	0	0	0	0	0	0	4	0	0	0	
			(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(44)	(0)	(0)	(0)	
	increased hematopoiesis		3	0	0	0	4	1	0	0	1	0	0	4	1	0	0	
			(23)	(0)	(0)	(0)	(40)	(10)	(0)	(0)	(14)	(0)	(0)	(44)	(11)	(0)	(0)	
spleen			<13>				<10>				< 7>				< 9>			
	angiectasis		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)	(44)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 4

		Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	13				10				7				9			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<13>				<10>				< 7>				< 9>			
	deposit of hemosiderin		5 (38)	1 (8)	0 (0)	0 (0)	4 (40)	4 (40)	0 (0)	0 (0)	4 (57)	1 (14)	0 (0)	0 (0)	3 (33)	1 (11)	0 (0)	0 (0)
	fibrosis:focal		2 (15)	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)
	extramedullary hematopoiesis		4 (31)	1 (8)	0 (0)	0 (0)	2 (20)	2 (20)	3 (30)	0 (0)	3 (43)	1 (14)	1 (14)	0 (0)	2 (22)	4 (44)	2 (22)	0 * (0)
	engorgement of erythrocyte		0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (22)	0 (0)	0 (0)	0 (0)
	capsule hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (67)	0 (0)	0 (0)	0 ** (0)
(Circulatory system)																		
heart			<13>				<10>				< 7>				< 9>			
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (11)	0 (0)	0 (0)
	mineralization		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)

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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																					
heart	inflammation	<13>				<10>				< 7>				< 9>							
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	(11)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	myocardial fibrosis	9	3	0	0	5	2	0	0	4	2	0	0	6	1	0	0	(67)	(11)	(0)	(0)
		(69)	(23)	(0)	(0)	(50)	(20)	(0)	(0)	(57)	(29)	(0)	(0)	(67)	(11)	(0)	(0)	(67)	(11)	(0)	(0)
artery/aort	mineralization:artery	<13>				<10>				< 7>				< 9>							
		0	0	0	0	1	0	0	0	0	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)
(Digestive system)																					
stomach	erosion:forestomach	<13>				<10>				< 7>				< 9>							
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach	0	0	1	1	0	0	3	0	0	0	0	0	0	1	0	0	(0)	(11)	(0)	(0)
		(0)	(0)	(8)	(8)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)
	hyperplasia:forestomach	0	0	0	0	1	0	0	0	0	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)

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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Control No. of Animals on Study Grade				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																	
stomach		<13>				<10>				< 7>				< 9>			
	erosion:glandular stomach	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	ulcer:glandular stomach	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)
	mineralization:glandular stomach	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)
	squamous cell hyperplasia:forestomach	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
small intes		<13>				<10>				< 7>				< 9>			
	erosion	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)
liver		<13>				<10>				< 7>				< 9>			
	herniation	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	fatty change:peripheral	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
		(0)	(0)	(8)	(0)	(10)	(0)	(10)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<13>				<10>				< 7>				< 9>							
	granulation	5	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(38)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	basophilic cell focus	1	0	0	0	0	0	0	0	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)	(0)	(0)	(0)	(0)
	bile duct hyperplasia	6	1	0	0	6	0	0	0	6	0	0	0	1	0	0	0	1	0	0	0
		(46)	(8)	(0)	(0)	(60)	(0)	(0)	(0)	(86)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	hemorrhage:central	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)
pancreas		<13>				<10>				< 7>				< 9>							
	atrophy	0	0	0	0	0	1	0	0	0	0	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)
	islet cell hyperplasia	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
{Urinary system}																					
kidney		<13>				<10>				< 7>				< 9>							
	deposit of pigment	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(22)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 8

		Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
Organ	Findings	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)				
(Urinary system)																					
kidney		<13>				<10>				< 7>				< 9>							
	chronic nephropathy	9 (69)	0 (0)	2 (15)	0 (0)	4 (40)	2 (20)	1 (10)	1 (10)	5 (71)	0 (0)	0 (0)	0 (0)	4 (44)	2 (22)	2 (22)	1 (11)				
	papillary necrosis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
	mineralization:papilla	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (22)	0 (0)	0 (0)	0 (0)				
	mineralization:pelvis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (56)	0 (0)	0 (0)	0 * (0)				
	mineralization:cortex	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
urin bladd		<13>				<10>				< 7>				< 9>							
	ulcer	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
	inflammation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (11)	0 (0)	0 (0)				
	transitional cell hyperplasia	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
Grade	1 : Slight 2 : Moderate 3 : Marked 4 : Severe																				
< a >	a : Number of animals examined at the site																				
b	b : Number of animals with lesion																				
(c)	c : b / a * 100																				
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																					

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
pituitary		<13>				<10>				< 7>				< 9>							
	hyperplasia	0	0	0	0	3	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(14)	(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid		<13>				<10>				< 7>				< 9>							
	C-cell hyperplasia	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(15)	(8)	(0)	(0)	(10)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal		<13>				<10>				< 7>				< 9>							
	extramedullary hematopoiesis	0	0	0	0	1	0	0	0	0	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)
	hyperplasia:cortical cell	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)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
{Reproductive system}																					
testis		<13>				<10>				< 7>				< 9>							
	mineralization	1	0	0	0	0	0	0	0	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)	(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

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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 10

		Group Name No. of Animals on Study Grade	Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
Organ_____	Findings_____		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
{Reproductive system}																		
testis			<13>				<10>				< 7>				< 9>			
	interstitial cell hyperplasia		2	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0
			(15)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
prostate			<13>				<10>				< 7>				< 9>			
	inflammation		2	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0
			(15)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(11)	(0)
	lymphocytic infiltration		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)
	hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<13>				<10>				< 7>				< 9>			
	cataract		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	retinal atrophy		1	0	0	0	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)

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

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 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade				Control 13				250 ppm 10				1000 ppm 7				4000 ppm 9			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																					
eye		<13>				<10>				< 7>				< 9>							
	keratitis	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0	2	0	0
		(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(22)	(0)	(0)
	iritis	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)
	mineralization:cornea	0	0	0	0	1	0	0	0	0	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)
Harder gl		<13>				<10>				< 7>				< 9>							
	lymphocytic infiltration	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
{Musculoskeletal system}																					
muscle		<13>				<10>				< 7>				< 9>							
	mineralization	0	0	0	0	1	0	0	0	0	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)

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 L 3

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

MALE: SACRIFICED ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<37>				<40>				<43>				<41>							
	scar	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell hyperplasia	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
subcutis		<37>				<40>				<43>				<41>							
	inflammation	0	0	0	0	0	1	0	0	0	0	0	0	0	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)
	fibrosis:focal	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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit		<37>				<40>				<43>				<41>							
	mineralization	23	0	0	0	29	0	0	0	32	0	0	0	28	0	0	0				
		(62)	(0)	(0)	(0)	(73)	(0)	(0)	(0)	(74)	(0)	(0)	(0)	(68)	(0)	(0)	(0)				
	eosinophilic change:olfactory epithelium	21	6	4	0	13	9	0	0 **	12	8	2	0 **	12	14	10	0 *				
		(57)	(16)	(11)	(0)	(33)	(23)	(0)	(0)	(28)	(19)	(5)	(0)	(29)	(34)	(24)	(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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade	Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit			<37>				<40>				<43>				<41>			
	eosinophilic change:respiratory epithelium		2	0	0	0	3	0	0	0	6	0	0	0	4	0	0	0
			(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	inflammation:foreign body		16	7	1	0	11	8	3	0	10	8	2	0	11	6	0	0
			(43)	(19)	(3)	(0)	(28)	(20)	(8)	(0)	(23)	(19)	(5)	(0)	(27)	(15)	(0)	(0)
	inflammation:respiratory epithelium		7	0	0	0	8	1	0	0	15	0	0	0	3	0	0	0
			(19)	(0)	(0)	(0)	(20)	(3)	(0)	(0)	(35)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	inflammation:olfactory epithelium		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		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)	(2)	(0)	(0)	(0)
	respiratory metaplasia:gland		30	0	0	0	27	0	0	0	36	0	0	0	34	0	0	0
			(81)	(0)	(0)	(0)	(68)	(0)	(0)	(0)	(84)	(0)	(0)	(0)	(83)	(0)	(0)	(0)
nasopharynx			<37>				<40>				<43>				<41>			
	inflammation:foreign body		0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
lung			<37>				<40>				<43>				<41>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Control No. of Animals on Study Grade				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
lung		<37>				<40>				<43>				<41>			
	accumulation of foamy cells	1 (3)	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)
	bronchopneumonia	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia	5 (14)	1 (3)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	1 (2)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
{Hematopoietic system}																	
bone marrow		<37>				<40>				<43>				<41>			
	hemorrhage	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin	1 (3)	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)
	granulation	1 (3)	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)
	increased hematopoiesis	5 (14)	1 (3)	0 (0)	0 (0)	4 (10)	2 (5)	0 (0)	0 (0)	4 (9)	3 (7)	0 (0)	0 (0)	10 (24)	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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
spleen		<37>				<40>				<43>				<41>							
	angiectasis	0	0	0	0	0	0	0	0	1	0	0	0	23	0	0	0	0 **			
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(0)			
	deposit of hemosiderin	11	0	0	0	17	0	0	0	23	0	0	0	25	1	0	0	0 **			
		(30)	(0)	(0)	(0)	(43)	(0)	(0)	(0)	(53)	(0)	(0)	(0)	(61)	(2)	(0)	(0)	(0)			
	fibrosis:focal	2	0	0	0	0	0	0	0	2	0	0	0	2	3	1	0				
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(7)	(2)	(0)				
	extramedullary hematopoiesis	22	4	1	0	24	6	2	0	31	5	2	0	29	9	1	0 *				
		(59)	(11)	(3)	(0)	(60)	(15)	(5)	(0)	(72)	(12)	(5)	(0)	(71)	(22)	(2)	(0)				
	engorgement of erythrocyte	1	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0 **			
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(37)	(0)	(0)	(0)	(0)			
	capsule hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0 **			
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(0)			
{Circulatory system}																					
heart		<37>				<40>				<43>				<41>							
	thrombus	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)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																					
heart		<37>				<40>				<43>				<41>							
	inflammation	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis	27	1	0	0	26	1	0	0	25	3	0	0	29	1	0	0	0	0	0	0
		(73)	(3)	(0)	(0)	(65)	(3)	(0)	(0)	(58)	(7)	(0)	(0)	(71)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	subendocardial fibrosis	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
artery/aort		<37>				<40>				<43>				<41>							
	mineralization:artery	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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																					
tooth		<37>				<40>				<43>				<41>							
	dysplasia	1	0	0	0	0	0	0	0	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)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 6

		Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
Organ	Findings	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)				
{Digestive system}																					
tongue		<37>				<40>				<43>				<41>							
	arteritis	1 (3)	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)				
salivary gl		<37>				<40>				<43>				<41>							
	lymphocytic 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)	1 (2)	0 (0)	0 (0)	0 (0)				
stomach		<37>				<40>				<43>				<41>							
	ulcer:forestomach	0 (0)	1 (3)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
	hyperplasia:forestomach	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)				
	erosion:glandular stomach	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	6 (14)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)				
	ulcer:glandular stomach	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (10)	0 (0)	0 (0)	0 (0)				
	mineralization:glandular stomach	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	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																					

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach		<37>				<40>				<43>				<41>							
	dilated glands	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver		<37>				<40>				<43>				<41>							
	herniation	6	0	0	0	5	0	0	0	4	0	0	0	5	0	0	0	5	0	0	0
		(16)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	granulation	7	0	0	0	0	0	0	0 *	0	0	0	0 **	1	0	0	0 *	2	0	0	0 *
		(19)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	inflammatory cell nest	15	0	0	0	18	1	0	0	26	0	0	0	17	0	0	0	41	0	0	0
		(41)	(0)	(0)	(0)	(45)	(3)	(0)	(0)	(60)	(0)	(0)	(0)	(41)	(0)	(0)	(0)	(41)	(0)	(0)	(0)
	extramedullary hematopoiesis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	clear cell focus	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
	acidophilic cell focus	9	1	0	0	4	3	0	0	14	2	2	0	6	5	1	0	15	12	2	0
		(24)	(3)	(0)	(0)	(10)	(8)	(0)	(0)	(33)	(5)	(5)	(0)	(15)	(12)	(2)	(0)	(15)	(12)	(2)	(0)
	basophilic cell focus	4	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	5	0	0	0
		(11)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 8

Organ	Findings	Control No. of Animals on Study Grade				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<37>				<40>				<43>				<41>			
	spongiosis hepatitis	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	bile duct hyperplasia	37	0	0	0	36	0	0	0	42	1	0	0	28	0	0	0 **
		(100)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(98)	(2)	(0)	(0)	(68)	(0)	(0)	(0)
	bile ductular proliferation	0	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)	(2)	(0)	(0)
	hepatocellular hypertrophy:central	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(46)	(0)	(0)	(0)
	focal fatty change	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas		<37>				<40>				<43>				<41>			
	atrophy	4	0	0	0	6	0	0	0	6	0	1	0	4	1	0	0
		(11)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(14)	(0)	(2)	(0)	(10)	(2)	(0)	(0)
	islet cell hyperplasia	2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	hyperplasia:acinar cell	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																					
kidney		<37>				<40>				<43>				<41>							
	deposit of pigment	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(41)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	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)
	scar	0	0	0	0	1	0	0	0	0	0	0	0	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)
	chronic nephropathy	18	15	4	0	26	10	4	0	17	19	6	1	5	18	18	0	0	0	0	0 **
		(49)	(41)	(11)	(0)	(65)	(25)	(10)	(0)	(40)	(44)	(14)	(2)	(12)	(44)	(44)	(0)	(0)	(0)	(0)	(0)
	mineralization:papilla	1	0	0	0	2	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis	2	0	0	0	3	0	0	0	0	0	0	0	19	2	0	0	0	0	0	0 **
		(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(46)	(5)	(0)	(0)	(0)	(0)	(0)	(0)
urin bladd	urothelial hyperplasia:pelvis	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)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilatation	<37>				<40>				<43>				<41>							
		0	0	0	0	0	0	1	0	0	0	0	0	0	0	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)

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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
urin bladd		<37>				<40>				<43>				<41>							
	transitional cell hyperplasia	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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																					
pituitary		<37>				<40>				<43>				<41>							
	angiectasis	0	0	0	0	4	0	0	0	1	0	0	0	1	1	0	0				
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)				
	cyst	1	0	0	0	5	0	0	0	1	0	0	0	1	0	0	0				
		(3)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
	hyperplasia	7	5	4	0	5	2	1	0	4	7	4	0	7	1	0	0 *				
		(19)	(14)	(11)	(0)	(13)	(5)	(3)	(0)	(9)	(16)	(9)	(0)	(17)	(2)	(0)	(0)				
	Rathke pouch	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0				
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
thyroid		<37>				<40>				<43>				<41>							
	follicular hyperplasia	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)	(2)	(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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 11

Organ_____	Findings_____	Group Name	Control				250 ppm				1000 ppm				4000 ppm						
		No. of Animals on Study	37				40				43				41						
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
(Endocrine system)																					
thyroid		<37>					<40>					<43>					<41>				
	C-cell hyperplasia	12	2	1	0	11	1	2	0	11	2	3	0	9	4	1	0				
		(32)	(5)	(3)	(0)	(28)	(3)	(5)	(0)	(26)	(5)	(7)	(0)	(22)	(10)	(2)	(0)				
adrenal		<37>					<40>					<43>					<41>				
	hyperplasia:cortical cell	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0				
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)				
	hyperplasia:medulla	1	0	1	0	4	0	0	0	4	0	0	0	3	0	2	0				
		(3)	(0)	(3)	(0)	(10)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(7)	(0)	(5)	(0)				
	focal fatty change:cortex	2	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0				
		(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				
(Reproductive system)																					
testis		<37>					<40>					<43>					<41>				
	mineralization	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
	inflammation	1	0	0	0	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)				

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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 12

Organ_____	Findings_____	Group Name	Control				250 ppm				1000 ppm				4000 ppm				
		No. of Animals on Study	37				40				43				41				
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Reproductive system}																			
testis		<37>					<40>				<43>				<41>				
	interstitial cell hyperplasia	4	0	0	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0
		(11)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
epididymis		<37>					<40>				<43>				<41>				
	inflammation	0	0	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)	(0)	(0)	(2)	(0)	(0)	(0)
	lymphocytic infiltration	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)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
semin ves		<37>					<40>				<43>				<41>				
	inflammation	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)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prostate		<37>					<40>				<43>				<41>				
	inflammation	0	1	0	0	0	2	0	0	0	0	2	1	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(5)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)
	hyperplasia	3	2	0	0	0	5	0	0	0	0	3	1	0	0	1	1	0	0
		(8)	(5)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(7)	(2)	(0)	(0)	(2)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																					
brain		<37>				<40>				<43>				<41>							
	mineralization	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia:chroid plexus	0	0	0	0	1	0	0	0	0	0	0	0	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)
{Special sense organs/appendage}																					
eye		<37>				<40>				<43>				<41>							
	cataract	6	1	0	0	5	1	0	0	6	1	0	0	4	3	0	0	4	3	0	0
		(16)	(3)	(0)	(0)	(13)	(3)	(0)	(0)	(14)	(2)	(0)	(0)	(10)	(7)	(0)	(0)	(10)	(7)	(0)	(0)
	retinal atrophy	17	3	1	0	2	4	5	0 **	1	3	6	0 **	3	6	5	0 **	3	6	5	0 **
		(46)	(8)	(3)	(0)	(5)	(10)	(13)	(0)	(2)	(7)	(14)	(0)	(7)	(15)	(12)	(0)	(7)	(15)	(12)	(0)
	keratitis	0	1	0	0	1	0	1	0	1	2	0	0	1	0	0	0	1	0	0	0
		(0)	(3)	(0)	(0)	(3)	(0)	(3)	(0)	(2)	(5)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	iritis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	mineralization:cornea	1	0	0	0	1	0	0	0	1	0	0	0	3	1	0	0	3	1	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(7)	(2)	(0)	(0)	(7)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study				Control 37				250 ppm 40				1000 ppm 43				4000 ppm 41			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Special sense organs/appendage}

Harder gl		<37>				<40>				<43>				<41>			
	lymphocytic infiltration	2	0	0	0	3	0	0	0	4	0	0	0	3	0	0	0
		(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	hyperplasia	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)	(2)	(0)	(0)	(0)

{Musculoskeletal system}

muscle		<37>				<40>				<43>				<41>			
	lymphocytic infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(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

TABLE L 4

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

FEMALE: ALL ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 18

		Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<50>				<50>				<50>				<50>			
	squamous cell hyperplasia		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)	(2)	(0)	(0)	(0)
subcutis			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	thrombus		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		19	0	0	0	23	0	0	0	27	0	0	0	23	0	0	0
			(38)	(0)	(0)	(0)	(46)	(0)	(0)	(0)	(54)	(0)	(0)	(0)	(46)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		9	31	9	0	13	27	9	0	13	31	6	0	3	28	17	0
			(18)	(62)	(18)	(0)	(26)	(54)	(18)	(0)	(26)	(62)	(12)	(0)	(6)	(56)	(34)	(0)
	eosinophilic change:respiratory epithelium		1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																					
nasal cavit		<50>				<50>				<50>				<50>				<50>			
	inflammation:foreign body	3	0	0	0	2	0	0	0	0	1	0	0	1	2	1	0	1	2	1	0
		(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(4)	(2)	(0)	(2)	(4)	(2)	(0)
	inflammation:respiratory epithelium	1	0	0	0	4	0	0	0	5	0	0	0	1	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:gland	47	0	0	0	49	0	0	0	48	0	0	0	48	0	0	0	48	0	0	0
		(94)	(0)	(0)	(0)	(98)	(0)	(0)	(0)	(96)	(0)	(0)	(0)	(96)	(0)	(0)	(0)	(96)	(0)	(0)	(0)
	ulcer:respiratory epithelium	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx		<50>				<50>				<50>				<50>				<50>			
	inflammation:foreign body	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
larynx		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	ulcer	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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
		<50>				<50>				<50>				<50>				<50>			
	inflammation:foreign body	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 20

		Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<50>			
	congestion		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration		1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
	accumulation of foamy cells		1	0	0	0	2	0	0	0	2	0	0	0	5	0	0	0
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	congestion		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(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																		

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
bone marrow		<50>				<50>				<50>				<50>				<50>			
	deposit of hemosiderin	2	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	granulation	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	4	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	increased hematopoiesis	9	2	0	0	2	2	0	0	7	1	0	0	8	4	0	0	16	8	0	0
		(18)	(4)	(0)	(0)	(4)	(4)	(0)	(0)	(14)	(2)	(0)	(0)	(16)	(8)	(0)	(0)	(16)	(8)	(0)	(0)
spleen		<50>				<50>				<50>				<50>				<50>			
	angiectasis	0	0	0	0	1	0	0	0	0	0	0	0	26	0	0	0	52	0	0	0 **
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(52)	(0)	(0)	(0)	(52)	(0)	(0)	(0)
	deposit of hemosiderin	38	5	0	0	32	11	0	0	27	17	0	0 *	35	1	0	0	70	2	0	0
		(76)	(10)	(0)	(0)	(64)	(22)	(0)	(0)	(54)	(34)	(0)	(0)	(70)	(2)	(0)	(0)	(70)	(2)	(0)	(0)
	fibrosis:focal	0	0	0	0	0	0	0	0	0	1	0	0	5	2	0	0 *	10	4	0	0 *
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(10)	(4)	(0)	(0)	(10)	(4)	(0)	(0)
	extramedullary hematopoiesis	32	9	3	0	38	6	1	0	27	18	4	0	24	16	3	0	48	32	6	0
		(64)	(18)	(6)	(0)	(76)	(12)	(2)	(0)	(54)	(36)	(8)	(0)	(48)	(32)	(6)	(0)	(48)	(32)	(6)	(0)
	engorgement of erythrocyte	0	0	0	0	0	0	0	0	3	0	0	0	24	0	0	0 **	48	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(48)	(0)	(0)	(0)	(48)	(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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<50>				<50>				<50>				<50>			
	capsule hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(82)	(0)	(0)	(0)
(Circulatory system)																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		31	0	0	0	27	0	0	0	29	1	0	0	31	0	0	0
			(62)	(0)	(0)	(0)	(54)	(0)	(0)	(0)	(58)	(2)	(0)	(0)	(62)	(0)	(0)	(0)
artery/aort			<50>				<50>				<50>				<50>			
	mineralization:artery		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)	(2)	(0)	(0)	(0)
(Digestive system)																		
oral cavity			<50>				<50>				<50>				<50>			
	squamous cell hyperplasia		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
tooth		<50>				<50>				<50>				<50>				<50>			
	dysplasia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
tongue		<50>				<50>				<50>				<50>				<50>			
	ulcer	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach		<50>				<50>				<50>				<50>				<50>			
	ulcer:forestomach	2	1	1	0	0	1	0	0	1	2	0	0	0	1	0	0	0	1	0	0
		(4)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(2)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia:forestomach	2	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach	6	1	0	0	2	0	0	0	4	1	0	0	6	1	0	0	6	1	0	0
		(12)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(12)	(2)	(0)	(0)	(12)	(2)	(0)	(0)
	ulcer:glandular stomach	2	1	0	0	0	1	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(4)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
stomach		<50>				<50>				<50>				<50>				<50>			
	hyperplasia:glandular stomach	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated glands	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
small intes		<50>				<50>				<50>				<50>				<50>			
	erosion	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
large intes		<50>				<50>				<50>				<50>				<50>			
	mineralization	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver		<50>				<50>				<50>				<50>				<50>			
	herniation	8	0	0	0	5	0	0	0	7	0	0	0	10	0	0	0	0	0	0	0
		(16)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(20)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver		<50>				<50>				<50>				<50>				<50>			
	necrosis:central	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
		(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	necrosis:focal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	fatty change:central	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change:peripheral	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest	22	3	0	0	28	3	0	0	21	2	1	0	10	1	0	0 *				
		(44)	(6)	(0)	(0)	(56)	(6)	(0)	(0)	(42)	(4)	(2)	(0)	(20)	(2)	(0)	(0)				
	extramedullary hematopoiesis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	acidophilic cell focus	5	1	1	0	3	1	2	0	3	1	1	0	8	1	0	0				
		(10)	(2)	(2)	(0)	(6)	(2)	(4)	(0)	(6)	(2)	(2)	(0)	(16)	(2)	(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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 26

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver		<50>				<50>				<50>				<50>				<50>			
	basophilic cell focus	23	3	0	0	17	1	0	0	16	1	0	0	10	0	0	0	10	0	0	0 **
		(46)	(6)	(0)	(0)	(34)	(2)	(0)	(0)	(32)	(2)	(0)	(0)	(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	bile duct hyperplasia	13	2	0	0	15	0	0	0	20	0	0	0	17	0	0	0	(34)	(0)	(0)	(0)
		(26)	(4)	(0)	(0)	(30)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(34)	(0)	(0)	(0)
pancreas	biliary cyst	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hepatocellular hypertrophy:central	0	0	0	0	0	0	0	0	1	0	0	0	28	1	0	0	(56)	(2)	(0)	(0) **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(56)	(2)	(0)	(0)	(56)	(2)	(0)	(0)
	focal fatty change	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	(2)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
pancreas	atrophy	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
pancreas		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	islet cell hyperplasia	2	0	1	0	0	0	1	0	2	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(4)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Urinary system)																					
kidney		<50>				<50>				<50>				<50>				<50>			
	hyaline droplet	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	(2)	(0)	(0)	(0)
kidney		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 27

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																					
kidney		<50>				<50>				<50>				<50>				<50>			
	deposit of pigment	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	0	*
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	20	3	1	0	18	0	1	0	20	2	6	0	23	5	2	0				
		(40)	(6)	(2)	(0)	(36)	(0)	(2)	(0)	(40)	(4)	(12)	(0)	(46)	(10)	(4)	(0)				
	hydronephrosis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:cortico-medullary junction	13	0	0	0	7	0	0	0	15	0	0	0	20	0	0	0				
		(26)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(40)	(0)	(0)	(0)				
	mineralization:papilla	7	0	0	0	2	0	0	0	2	0	0	0	7	0	0	0				
		(14)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(14)	(0)	(0)	(0)				
	mineralization:pelvis	1	0	0	0	5	0	0	0	7	1	0	0 *	18	2	0	0 **				
		(2)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(14)	(2)	(0)	(0)	(36)	(4)	(0)	(0)				
	mineralization:cortex	4	0	0	0	9	0	0	0	10	0	0	0	8	0	0	0				
		(8)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(16)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 28

Organ	Findings	Group Name No. of Animals on Study				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																					
kidney		<50>				<50>				<50>				<50>				<50>			
	atypical tubule hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
urin bladd		<50>				<50>				<50>				<50>				<50>			
	dilatation	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
		(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
	transitional cell hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Endocrine system)																					
pituitary		<50>				<50>				<50>				<50>				<50>			
	angiectasis	4	3	0	0	6	0	0	0	4	2	1	0	2	4	1	0	2	4	1	0
		(8)	(6)	(0)	(0)	(12)	(0)	(0)	(0)	(8)	(4)	(2)	(0)	(4)	(8)	(2)	(0)	(4)	(8)	(2)	(0)
	cyst	14	1	1	0	14	4	0	0	11	2	0	0	14	2	0	0	14	2	0	0
		(28)	(2)	(2)	(0)	(28)	(8)	(0)	(0)	(22)	(4)	(0)	(0)	(28)	(4)	(0)	(0)	(28)	(4)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 29

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																					
pituitary		<50>				<50>				<50>				<50>				<50>			
	hyperplasia	6 (12)	4 (8)	1 (2)	0 (0)	5 (10)	5 (10)	1 (2)	0 (0)	5 (10)	4 (8)	1 (2)	0 (0)	2 (4)	4 (8)	1 (2)	0 (0)	2 (4)	4 (8)	1 (2)	0 (0)
	Rathke pouch	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
thyroid		<50>				<50>				<50>				<50>				<50>			
	inflammation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	ultimobranchial body remanet	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	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)
	follicular hyperplasia	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 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	C-cell hyperplasia	14 (28)	6 (12)	5 (10)	0 (0)	12 (24)	4 (8)	1 (2)	0 (0)	14 (28)	3 (6)	1 (2)	0 (0)	11 (22)	2 (4)	2 (4)	0 (0)	11 (22)	2 (4)	2 (4)	0 (0)
adrenal		<50>				<50>				<50>				<50>				<50>			
	fatty change	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 30

		Group Name No. of Animals on Study	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
Organ_____	Findings_____	Grade	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	focal fatty change:cortex		3	0	0	0	1	1	0	0	0	1	0	0	4	0	0	0
			(6)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(8)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<50>				<50>				<50>				<50>			
	cyst		1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)
			<50>				<50>				<50>				<50>			
	lymphocytic infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
uterus			<50>				<50>				<50>				<50>			
	dilatation		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)	(2)	(0)	(0)	(0)
			<50>				<50>				<50>				<50>			
	hyperplasia:gland		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
			<50>				<50>				<50>				<50>			
	stromal hyperplasia		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 31

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																		
uterus	cystic endometrial hyperplasia		<50>				<50>				<50>				<50>			
			5	0	0	0	2	0	0	0	4	0	0	0	3	0	0	0
			(10)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
mammary gl	hyperplasia		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	galactoceles		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Nervous system)																		
brain	hemorrhage		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	gliosis		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)	(2)	(0)	(0)	(0)
(Special sense organs/appendage)																		
eye	cataract		<50>				<50>				<50>				<50>			
			2	0	0	0	2	0	0	0	3	2	0	0	2	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(4)	(0)	(0)	(4)	(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. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 32

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				250 ppm 50				1000 ppm 50				4000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																					
eye	retinal atrophy	24 (48)	9 (18)	1 (2)	0 (0)	15 (30)	5 (10)	0 (0)	0 * (0)	5 (10)	2 (4)	5 (10)	0 ** (0)	22 (44)	5 (10)	2 (4)	0 (0)				
	keratitis	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	iritis	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	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)
	mineralization:cornea	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Harder gl	lymphocytic infiltration	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	1 (2)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)				
nasolacr d	inflammation	2 (4)	1 (2)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)				
(Musculoskeletal system)																					
muscle	mineralization	1 (2)	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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 33

Organ	Findings	Group Name				Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study				50				50				50				50			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Musculoskeletal system)																					
bone	osteosclerosis	<50>				2	2	0	0	3	0	0	0	1	1	0	0	1	0	0	0
		(4)	(4)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

(HPT150)

BAIS4

TABLE L 5

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

FEMALE: DEAD AND MORIBUND ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 12

		Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	10				7				5				7			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<10>				< 7>				< 5>				< 7>			
	thrombus		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)
	mineralization		3	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0
			(30)	(0)	(0)	(0)	(43)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(43)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		3	5	2	0	4	2	0	0	3	1	1	0	0	4	2	0
			(30)	(50)	(20)	(0)	(57)	(29)	(0)	(0)	(60)	(20)	(20)	(0)	(0)	(57)	(29)	(0)
	respiratory metaplasia:gland		9	0	0	0	6	0	0	0	5	0	0	0	6	0	0	0
			(90)	(0)	(0)	(0)	(86)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(86)	(0)	(0)	(0)
	ulcer:respiratory epithelium		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)
lung			<10>				< 7>				< 5>				< 7>			
	congestion		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		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)	(14)	(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																		

STUDY NO. : 0684
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 13

Organ_____	Findings_____	Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	10				7				5				7			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow			<10>				< 7>				< 5>				< 7>			
	deposit of hemosiderin		2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	granulation		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)	(14)	(0)	(0)	(0)	
	increased hematopoiesis		4	2	0	0	1	2	0	0	3	0	0	2	2	0	0	
			(40)	(20)	(0)	(0)	(14)	(29)	(0)	(0)	(60)	(0)	(0)	(29)	(29)	(0)	(0)	
spleen			<10>				< 7>				< 5>				< 7>			
	angiectasis		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	
	deposit of hemosiderin		5	1	0	0	1	3	0	0	2	1	0	2	1	0	0	
			(50)	(10)	(0)	(0)	(14)	(43)	(0)	(0)	(40)	(20)	(0)	(29)	(14)	(0)	(0)	
	fibrosis:focal		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(29)	(0)	(0)		
	extramedullary hematopoiesis		4	0	3	0	1	1	1	0	2	0	3	0	1	3	0	
			(40)	(0)	(30)	(0)	(14)	(14)	(14)	(0)	(40)	(0)	(60)	(0)	(0)	(14)	(43)	
	capsule hyperplasia		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)	(57)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 14

Organ_____	Findings_____	Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	10				7				5				7			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Circulatory system}																		
heart			<10>				< 7>				< 5>				< 7>			
	thrombus		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)	(0)	(0)
	myocardial fibrosis		7	0	0	0	4	0	0	0	5	0	0	0	6	0	0	0
			(70)	(0)	(0)	(0)	(57)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(86)	(0)	(0)	(0)
<hr/>																		
{Digestive system}																		
tongue			<10>				< 7>				< 5>				< 7>			
	ulcer		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach			<10>				< 7>				< 5>				< 7>			
	ulcer:forestomach		0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0
			(0)	(0)	(10)	(0)	(0)	(14)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)
	hyperplasia:forestomach		1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
			<10>				< 7>				< 5>				< 7>			
	erosion:glandular stomach		3	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(30)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(14)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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STUDY NO. : 0684
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 15

Organ	Findings	Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	10				7				5				7			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach	ulcer:glandular stomach		<10>				< 7>				< 5>				< 7>			
		1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(10)	(10)	(0)	(0)	(0)	(14)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
large intes	mineralization		<10>				< 7>				< 5>				< 7>			
		0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)
liver	herniation		<10>				< 7>				< 5>				< 7>			
		1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
	necrosis:central		0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(10)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)
	necrosis:focal		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	fatty change:central		0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(14)	(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																		

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 16

Organ	Findings	Control 10				250 ppm 7				1000 ppm 5				4000 ppm 7			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<10>				< 7>				< 5>				< 7>			
	acidophilic cell focus	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)	(0)	(0)
	basophilic cell focus	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	bile duct hyperplasia	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	hepatocellular hypertrophy:central	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)	(14)	(0)	(0)	(0)
{Urinary system}																	
kidney		<10>				< 7>				< 5>				< 7>			
	hyaline droplet	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	2	0	0	0	1	0	1	0	1	0	0	0	3	1	0	0
		(20)	(0)	(0)	(0)	(14)	(0)	(14)	(0)	(20)	(0)	(0)	(0)	(43)	(14)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control 10				250 ppm 7				1000 ppm 5				4000 ppm 7			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<10>				< 7>				< 5>				< 7>			
	hydronephrosis		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)
	mineralization:cortico-medullary junction		2	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0
			(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
	mineralization:papilla		3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(30)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis		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)	(14)	(14)	(0)	(0)
	mineralization:cortex		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
urin bladd			<10>				< 7>				< 5>				< 7>			
	dilatation		0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<10>				< 7>				< 5>				< 7>			
	angiectasis		1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 18

		Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	10				7				5				7			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary			<10>				< 7>				< 5>				< 7>			
	cyst		2	1	0	0	1	1	0	0	0	0	0	0	2	0	0	0
			(20)	(10)	(0)	(0)	(14)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
	hyperplasia		0	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)	(14)	(0)	(0)
	Rathke pouch		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)	(14)	(0)	(0)	(0)	
thyroid			<10>				< 7>				< 5>				< 7>			
	C-cell hyperplasia		0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0
			(0)	(10)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)
(Reproductive system)																		
ovary			<10>				< 7>				< 5>				< 7>			
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	
uterus			<10>				< 7>				< 5>				< 7>			
	stromal hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(14)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 19

Organ	Findings	Control No. of Animals on Study Grade				250 ppm 7				1000 ppm 5				4000 ppm 7			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																	
uterus		<10>				< 7>				< 5>				< 7>			
	cystic endometrial hyperplasia	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																	
brain		<10>				< 7>				< 5>				< 7>			
	gliosis	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)	(14)	(0)	(0)	(0)
{Special sense organs/appendage}																	
eye		<10>				< 7>				< 5>				< 7>			
	cataract	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)	(14)	(0)	(0)	(0)
	retinal atrophy	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(14)	(0)
Harder gl		<10>				< 7>				< 5>				< 7>			
	lymphocytic infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(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 : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 20

Organ	Findings	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study				7				5				7			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																	
nasolacr d		<10>				< 7>				< 5>				< 7>			
	inflammation	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																	
muscle		<10>				< 7>				< 5>				< 7>			
	mineralization	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)
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																

(HPT150)

BATS4

TABLE L 6

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

FEMALE: SACRIFICED ANIMALS

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<40>				<43>				<45>				<43>							
	squamous cell hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
subcutis		<40>				<43>				<45>				<43>							
	inflammation	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit		<40>				<43>				<45>				<43>							
	mineralization	16	0	0	0	20	0	0	0	25	0	0	0	20	0	0	0	20	0	0	0
		(40)	(0)	(0)	(0)	(47)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(47)	(0)	(0)	(0)	(47)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium	6	26	7	0	9	25	9	0	10	30	5	0	3	24	15	0	3	24	15	0
		(15)	(65)	(18)	(0)	(21)	(58)	(21)	(0)	(22)	(67)	(11)	(0)	(7)	(56)	(35)	(0)	(7)	(56)	(35)	(0)
	eosinophilic change:respiratory epithelium	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	inflammation:foreign body	3	0	0	0	2	0	0	0	0	1	0	0	1	2	1	0	1	2	1	0
		(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(5)	(2)	(0)	(2)	(5)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 16

Organ	Findings	Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<40>				<43>				<45>				<43>			
	inflammation:respiratory epithelium	1 (3)	0 (0)	0 (0)	0 (0)	4 (9)	0 (0)	0 (0)	0 (0)	5 (11)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:gland	38 (95)	0 (0)	0 (0)	0 (0)	43 (100)	0 (0)	0 (0)	0 (0)	43 (96)	0 (0)	0 (0)	0 (0)	42 (98)	0 (0)	0 (0)	0 (0)
nasopharynx		<40>				<43>				<45>				<43>			
	inflammation:foreign body	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 (2)	0 (0)	0 (0)	0 (0)
larynx		<40>				<43>				<45>				<43>			
	ulcer	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammation:foreign body	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 (2)	0 (0)	0 (0)	0 (0)
lung		<40>				<43>				<45>				<43>			
	inflammatory infiltration	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	accumulation of foamy cells	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	5 (12)	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																

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
lung		<40>				<43>				<45>				<43>							
	bronchiolar-alveolar cell hyperplasia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																					
bone marrow		<40>				<43>				<45>				<43>							
	congestion	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	increased hematopoiesis	5	0	0	0	1	0	0	0	4	1	0	0	6	2	0	0	6	2	0	0
		(13)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(9)	(2)	(0)	(0)	(14)	(5)	(0)	(0)	(14)	(5)	(0)	(0)
spleen		<40>				<43>				<45>				<43>							
	angiectasis	0	0	0	0	1	0	0	0	0	0	0	0	24	0	0	0	24	0	0	0 **
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(56)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 18

Organ	Findings	Group Name	Control				250 ppm				1000 ppm				4000 ppm			
		No. of Animals on Study	40				43				45				43			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<40>				<43>				<45>				<43>			
	deposit of hemosiderin	33	4	0	0	31	8	0	0	25	16	0	0 *	33	0	0	0 *	
		(83)	(10)	(0)	(0)	(72)	(19)	(0)	(0)	(56)	(36)	(0)	(0)	(77)	(0)	(0)	(0)	
	fibrosis:focal	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(12)	(0)	(0)	(0)	
	extramedullary hematopoiesis	28	9	0	0	37	5	0	0	25	18	1	0	24	15	0	0	
		(70)	(23)	(0)	(0)	(86)	(12)	(0)	(0)	(56)	(40)	(2)	(0)	(56)	(35)	(0)	(0)	
	engorgement of erythrocyte	0	0	0	0	0	0	0	0	3	0	0	0	24	0	0	0 **	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	
	capsule hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0 **	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(86)	(0)	(0)	(0)	
(Circulatory system)																		
heart			<40>				<43>				<45>				<43>			
	myocardial fibrosis	24	0	0	0	23	0	0	0	24	1	0	0	25	0	0	0	
		(60)	(0)	(0)	(0)	(53)	(0)	(0)	(0)	(53)	(2)	(0)	(0)	(58)	(0)	(0)	(0)	
artery/aort			<40>				<43>				<45>				<43>			
	mineralization:artery	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)	(2)	(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																		

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
oral cavity		<40>				<43>				<45>				<43>							
	squamous cell hyperplasia	0	1	0	0	0	0	0	0	0	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)	(0)	(0)	(0)
tooth		<40>				<43>				<45>				<43>							
	dysplasia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
tongue		<40>				<43>				<45>				<43>							
	lymphocytic infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach		<40>				<43>				<45>				<43>							
	ulcer:forestomach	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
		(5)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach	3	0	0	0	2	0	0	0	3	1	0	0	6	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(2)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach		<40>				<43>				<45>				<43>							
	hyperplasia:glandular stomach	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated glands	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
small intes		<40>				<43>				<45>				<43>							
	erosion	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
large intes		<40>				<43>				<45>				<43>							
	mineralization	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	1	0	0	0	0	0	0	0	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)	(0)	(0)	(0)	(0)
liver		<40>				<43>				<45>				<43>							
	herniation	7	0	0	0	5	0	0	0	5	0	0	0	8	0	0	0	0	0	0	0
		(18)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(19)	(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																				

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<40>				<43>				<45>				<43>							
	necrosis:central	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	1	0	0	0	0	0	0	0	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)	(0)	(0)	(0)	(0)
	fatty change:peripheral	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest	22	3	0	0	27	3	0	0	21	2	1	0	10	1	0	0	0	0	0	**
		(55)	(8)	(0)	(0)	(63)	(7)	(0)	(0)	(47)	(4)	(2)	(0)	(23)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis	1	0	0	0	0	0	0	0	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)	(0)	(0)	(0)	(0)
	acidophilic cell focus	5	1	0	0	3	1	2	0	3	1	1	0	8	1	0	0	0	0	0	0
		(13)	(3)	(0)	(0)	(7)	(2)	(5)	(0)	(7)	(2)	(2)	(0)	(19)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus	21	3	0	0	17	1	0	0	15	1	0	0	9	0	0	0	0	0	0	**
		(53)	(8)	(0)	(0)	(40)	(2)	(0)	(0)	(33)	(2)	(0)	(0)	(21)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<40>				<43>				<45>				<43>							
	bile duct hyperplasia	12	2	0	0	15	0	0	0	20	0	0	0	16	0	0	0	16	0	0	0
		(30)	(5)	(0)	(0)	(35)	(0)	(0)	(0)	(44)	(0)	(0)	(0)	(37)	(0)	(0)	(0)	(37)	(0)	(0)	(0)
	biliary cyst	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hepatocellular hypertrophy:central	0	0	0	0	0	0	0	0	1	0	0	0	27	1	0	0	63	2	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(63)	(2)	(0)	(0)	(63)	(2)	(0)	(0)
	focal fatty change	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
pancreas		<40>				<43>				<45>				<43>							
	atrophy	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	islet cell hyperplasia	2	0	1	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
		(5)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																					
kidney		<40>				<43>				<45>				<43>							
	deposit of pigment	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0	14	0	0	0 *
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)

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

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 23

Organ_____	Findings_____	Group Name No. of Animals on Study				Control				250 ppm				1000 ppm				4000 ppm			
		Grade				40				43				45				43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Urinary system}																					
kidney		<40>				<43>				<45>				<43>							
	chronic nephropathy	18	3	1	0	17	0	0	0	19	2	6	0	20	4	2	0				
		(45)	(8)	(3)	(0)	(40)	(0)	(0)	(0)	(42)	(4)	(13)	(0)	(47)	(9)	(5)	(0)				
	mineralization:cortico-medullary junction	11	0	0	0	6	0	0	0	13	0	0	0	18	0	0	0				
		(28)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(42)	(0)	(0)	(0)				
	mineralization:papilla	4	0	0	0	1	0	0	0	2	0	0	0	7	0	0	0				
		(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(16)	(0)	(0)	(0)				
mineralization:pelvis	1	0	0	0	5	0	0	0	7	1	0	0	17	1	0	0 **					
	(3)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(16)	(2)	(0)	(0)	(40)	(2)	(0)	(0)					
mineralization:cortex	2	0	0	0	9	0	0	0	10	0	0	0 *	8	0	0	0					
	(5)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(19)	(0)	(0)	(0)					
	atypical tubule hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
urin bladd		<40>				<43>				<45>				<43>							
	transitional cell hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
{Endocrine system}																					
pituitary		<40>				<43>				<45>				<43>							
	angiectasis	3	3	0	0	6	0	0	0	4	1	1	0	2	4	1	0				
	(8)	(8)	(0)	(0)	(14)	(0)	(0)	(0)	(9)	(2)	(2)	(0)	(5)	(9)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study Grade				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
pituitary		<40>				<43>				<45>				<43>							
	cyst	12	0	1	0	13	3	0	0	11	2	0	0	12	2	0	0	12	2	0	0
		(30)	(0)	(3)	(0)	(30)	(7)	(0)	(0)	(24)	(4)	(0)	(0)	(28)	(5)	(0)	(0)	(28)	(5)	(0)	(0)
	hyperplasia	6	4	1	0	5	5	1	0	5	4	1	0	2	3	1	0	5	7	2	0
		(15)	(10)	(3)	(0)	(12)	(12)	(2)	(0)	(11)	(9)	(2)	(0)	(5)	(7)	(2)	(0)	(5)	(7)	(2)	(0)
	Rathke pouch	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid		<40>				<43>				<45>				<43>							
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	ultimobranchial body remanet	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	follicular hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	C-cell hyperplasia	14	5	3	0	12	4	1	0	14	3	1	0	11	2	1	0	26	5	2	0
		(35)	(13)	(8)	(0)	(28)	(9)	(2)	(0)	(31)	(7)	(2)	(0)	(26)	(5)	(2)	(0)	(26)	(5)	(2)	(0)
adrenal		<40>				<43>				<45>				<43>							
	fatty change	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study				Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
adrenal		<40>				<43>				<45>				<43>							
	focal fatty change:cortex	3	0	0	0	1	1	0	0	0	1	0	0	4	0	0	0	(9)	(0)	(0)	(0)
		(8)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				
{Reproductive system}																					
ovary		<40>				<43>				<45>				<43>							
	cyst	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				
	lymphocytic infiltration	1	0	0	0	0	0	0	0	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)				
uterus		<40>				<43>				<45>				<43>							
	dilatation	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	(2)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
	hyperplasia:gland	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
	stromal hyperplasia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 26

		Group Name No. of Animals on Study	Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
{Reproductive system}																		
uterus			<40>				<43>				<45>				<43>			
	cystic endometrial hyperplasia		3	0	0	0	2	0	0	0	4	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
mammary gl			<40>				<43>				<45>				<43>			
	hyperplasia		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	galactoceles		1	0	0	0	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)
{Nervous system}																		
brain			<40>				<43>				<45>				<43>			
	hemorrhage		1	0	0	0	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)
{Special sense organs/appendage}																		
eye			<40>				<43>				<45>				<43>			
	cataract		2	0	0	0	2	0	0	0	3	2	0	0	1	0	0	0
			(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(4)	(0)	(0)	(2)	(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. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 27

		Control 40				250 ppm 43				1000 ppm 45				4000 ppm 43			
Group Name No. of Animals on Study Grade		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____ Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																	
eye		<40>				<43>				<45>				<43>			
	retinal atrophy	24	9	1	0	15	5	0	0 **	5	2	5	0 **	21	5	1	0
		(60)	(23)	(3)	(0)	(35)	(12)	(0)	(0)	(11)	(4)	(11)	(0)	(49)	(12)	(2)	(0)
	keratitis	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	iritis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:cornea	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl		<40>				<43>				<45>				<43>			
	lymphocytic infiltration	1	0	0	0	3	0	0	0	1	1	0	0	1	1	0	0
		(3)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
nasolacr d		<40>				<43>				<45>				<43>			
	inflammation	2	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0
		(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
{Musculoskeletal system}																	
bone		<40>				<43>				<45>				<43>			
	osteosclerosis	2	2	0	0	3	0	0	0	1	1	0	0	1	0	0	0
		(5)	(5)	(0)	(0)	(7)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(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 M 1

NUMBER OF ANIMALS WITH TUMORS AND
NUMBER OF TUMORS-TIME RELATED: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 1

Time-related Weeks	Items	Group Name	Control	250 ppm	1000 ppm	4000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	0
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		4	1	2	1
	NO. OF ANIMALS WITH TUMORS		4	1	2	1
	NO. OF ANIMALS WITH SINGLE TUMORS		2	1	1	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		2	0	1	0
	NO. OF BENIGN TUMORS		5	1	1	0
	NO. OF MALIGNANT TUMORS		1	0	2	1
	NO. OF TOTAL TUMORS		6	1	3	1
79 - 104	NO. OF EXAMINED ANIMALS		9	9	5	8
	NO. OF ANIMALS WITH TUMORS		9	9	5	8
	NO. OF ANIMALS WITH SINGLE TUMORS		2	2	1	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		7	7	4	7
	NO. OF BENIGN TUMORS		15	11	7	11
	NO. OF MALIGNANT TUMORS		5	7	3	7
	NO. OF TOTAL TUMORS		20	18	10	18
105 - 105	NO. OF EXAMINED ANIMALS		37	40	43	41
	NO. OF ANIMALS WITH TUMORS		37	40	43	41
	NO. OF ANIMALS WITH SINGLE TUMORS		12	10	16	16
	NO. OF ANIMALS WITH MULTIPLE TUMORS		25	30	27	25
	NO. OF BENIGN TUMORS		69	88	85	74
	NO. OF MALIGNANT TUMORS		11	5	5	6
	NO. OF TOTAL TUMORS		80	93	90	80

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 2

Time-related Weeks	Items	Group Name	Control	250 ppm	1000 ppm	4000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		50	50	50	50
	NO. OF ANIMALS WITH SINGLE TUMORS		16	13	18	18
	NO. OF ANIMALS WITH MULTIPLE TUMORS		34	37	32	32
	NO. OF BENIGN TUMORS		89	100	93	85
	NO. OF MALIGNANT TUMORS		17	12	10	14
	NO. OF TOTAL TUMORS		106	112	103	99

(HPT070)

BATS4

TABLE M 2

NUMBER OF ANIMALS WITH TUMORS AND
NUMBER OF TUMORS-TIME RELATED: FEMALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 3

Time-related Weeks	Items	Group Name	Control	250 ppm	1000 ppm	4000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	2	0	0
	NO. OF ANIMALS WITH TUMORS		0	2	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	2	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	2	0	0
	NO. OF TOTAL TUMORS		0	2	0	0
53 - 78	NO. OF EXAMINED ANIMALS		1	0	1	0
	NO. OF ANIMALS WITH TUMORS		1	0	1	0
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		1	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	1	0
	NO. OF TOTAL TUMORS		1	0	1	0
79 - 104	NO. OF EXAMINED ANIMALS		9	5	4	7
	NO. OF ANIMALS WITH TUMORS		9	5	4	7
	NO. OF ANIMALS WITH SINGLE TUMORS		6	3	2	3
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	2	2	4
	NO. OF BENIGN TUMORS		9	3	2	6
	NO. OF MALIGNANT TUMORS		6	4	4	6
	NO. OF TOTAL TUMORS		15	7	6	12
105 - 105	NO. OF EXAMINED ANIMALS		40	43	45	43
	NO. OF ANIMALS WITH TUMORS		24	34	37	28
	NO. OF ANIMALS WITH SINGLE TUMORS		14	21	27	19
	NO. OF ANIMALS WITH MULTIPLE TUMORS		10	13	10	9
	NO. OF BENIGN TUMORS		30	41	40	29
	NO. OF MALIGNANT TUMORS		7	10	9	8
	NO. OF TOTAL TUMORS		37	51	49	37

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

PAGE : 4

Time-related Weeks	Items	Group Name	Control	250 ppm	1000 ppm	4000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		34	41	42	35
	NO. OF ANIMALS WITH SINGLE TUMORS		21	26	30	22
	NO. OF ANIMALS WITH MULTIPLE TUMORS		13	15	12	13
	NO. OF BENIGN TUMORS		40	44	42	35
	NO. OF MALIGNANT TUMORS		13	16	14	14
	NO. OF TOTAL TUMORS		53	60	56	49

(HPT070)

BAIS4

TABLE N 1

HISTOPATHOLOGICAL FINDINGS:
NEOPLASTIC LESIONS: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	trichoepithelioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	basal cell epithelioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	keratoacanthoma		3 (6%)	3 (6%)	5 (10%)	2 (4%)
	sebaceous adenoma		2 (4%)	0 (0%)	0 (0%)	0 (0%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		2 (4%)	11 (22%)	3 (6%)	2 (4%)
	lipoma		1 (2%)	0 (0%)	1 (2%)	0 (0%)
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	fibrosarcoma		0 (0%)	2 (4%)	0 (0%)	1 (2%)
	hemangiosarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
lung			<50>	<50>	<50>	<50>
	bronchiolar alveolar adenoma		0 (0%)	2 (4%)	1 (2%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BAIS4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Respiratory system}						
lung	bronchiolar-alveolar carcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	bronchial carcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Hematopoietic system}						
thymus	thymoma:malignant		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
spleen	fibroma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	hemangioma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	sarcoma:NOS		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	mononuclear cell leukemia		5 (10%)	3 (6%)	2 (4%)	1 (2%)
	hemangiosarcoma		0 (0%)	0 (0%)	0 (0%)	3 (6%)
{Digestive system}						
oral cavity	squamous cell carcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
large intes	mucinous adenocarcinoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
liver	hepatocellular adenoma		<50> 2 (4%)	<50> 1 (2%)	<50> 0 (0%)	<50> 2 (4%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 3

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	hepatocellular carcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
pancreas			<50>	<50>	<50>	<50>
	islet cell adenoma		6 (12%)	3 (6%)	2 (4%)	0 (0%)
	mixed acinar-islet cell adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	islet cell adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
{Urinary system}						
urin bladd			<50>	<50>	<50>	<50>
	transitional cell papilloma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	adenoma		17 (34%)	19 (38%)	11 (22%)	8 (16%)
	adenocarcinoma		1 (2%)	2 (4%)	0 (0%)	2 (4%)
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		11 (22%)	10 (20%)	12 (24%)	13 (26%)
	follicular adenoma		1 (2%)	0 (0%)	0 (0%)	2 (4%)
	C-cell carcinoma		1 (2%)	1 (2%)	2 (4%)	1 (2%)
	follicular adenocarcinoma		1 (2%)	1 (2%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BAIS4

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 4

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Endocrine system}						
adrenal	pheochromocytoma		<50> 4 (8%)	<50> 8 (16%)	<50> 4 (8%)	<50> 4 (8%)
	pheochromocytoma:malignant		0 (0%)	0 (0%)	2 (4%)	0 (0%)
{Reproductive system}						
testis	interstitial cell tumor		<50> 37 (74%)	<50> 40 (80%)	<50> 46 (92%)	<50> 46 (92%)
mammary gl	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	fibroadenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
prep/cli gl	adenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)
{Nervous system}						
brain	granular cell tumor		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	glioma		2 (4%)	0 (0%)	0 (0%)	0 (0%)
spinal cord	glioma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
periph nerv	schwannoma:malignant		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Special sense organs/appendage}						
Zymbal gl			<50>	<50>	<50>	<50>
	Zmbal gland tumor:benign		0 (0%)	1 (2%)	1 (2%)	0 (0%)
	Zymbal gland tumor:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Body cavities}						
pleura			<50>	<50>	<50>	<50>
	mesothelioma		0 (0%)	1 (2%)	2 (4%)	0 (0%)
peritoneum			<50>	<50>	<50>	<50>
	mesothelioma		0 (0%)	0 (0%)	1 (2%)	2 (4%)
retroperit			<50>	<50>	<50>	<50>
	paraganglioma:benign		0 (0%)	0 (0%)	1 (2%)	0 (0%)
adipose			<50>	<50>	<50>	<50>
	lipoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
< a > a : Number of animals examined at the site b (c) b : Number of animals with neoplasm c : b / a * 100						

(HPT085)

BAIS4

TABLE N 2

HISTOPATHOLOGICAL FINDINGS:
NEOPLASTIC LESIONS: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 6

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	keratoacanthoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		1 (2%)	2 (4%)	0 (0%)	0 (0%)
	lipoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	fibrosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	leiomyosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	schwannoma:malignant		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	bronchial carcinoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	mononuclear cell leukemia		3 (6%)	2 (4%)	0 (0%)	5 (10%)
	hemangiosarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Digestive system}						
stomach			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	0 (0%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Digestive system}						
small intes			<50>	<50>	<50>	<50>
	leiomyoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	leiomyosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
liver			<50>	<50>	<50>	<50>
	hepatocellular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	hepatocellular carcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
pancreas			<50>	<50>	<50>	<50>
	islet cell adenoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
	mixed acinar-islet cell adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	islet cell adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	lipoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
urin bladd			<50>	<50>	<50>	<50>
	transitional cell papilloma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	adenoma		11 (22%)	13 (26%)	12 (24%)	16 (32%)
	adenocarcinoma		2 (4%)	1 (2%)	4 (8%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 8

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Endocrine system}						
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		7 (14%)	9 (18%)	7 (14%)	5 (10%)
	follicular adenoma		0 (0%)	1 (2%)	1 (2%)	2 (4%)
	C-cell carcinoma		2 (4%)	2 (4%)	2 (4%)	0 (0%)
	follicular adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
adrenal			<50>	<50>	<50>	<50>
	pheochromocytoma		1 (2%)	2 (4%)	0 (0%)	1 (2%)
	cortical adenoma		1 (2%)	0 (0%)	1 (2%)	1 (2%)
	cortical adenocarcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Reproductive system}						
uterus			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	hemangioma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	endometrial stromal polyp		5 (10%)	2 (4%)	6 (12%)	7 (14%)
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	4 (8%)
	leiomyosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 9

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Reproductive system}						
uterus			<50>	<50>	<50>	<50>
	endometrial stromal sarcoma		0 (0%)	2 (4%)	2 (4%)	1 (2%)
vagina			<50>	<50>	<50>	<50>
	leiomyosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
mammary gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	fibroadenoma		8 (16%)	11 (22%)	7 (14%)	2 (4%)
prep/cli gl	adenocarcinoma		1 (2%)	0 (0%)	2 (4%)	1 (2%)
			<50>	<50>	<50>	<50>
prep/cli gl	adenoma		1 (2%)	2 (4%)	2 (4%)	0 (0%)
			<50>	<50>	<50>	<50>
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	glioma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
spinal cord			<50>	<50>	<50>	<50>
	glioma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
periph nerv			<50>	<50>	<50>	<50>
	schwannoma:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<50>
	adenocarcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
Zymbal gl			<50>	<50>	<50>	<50>
	adenocarcinoma		1 (2%)	1 (2%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
 b (c) b : Number of animals with neoplasm c : b / a * 100

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 10

Organ	Findings	Group Name No. of animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
(Musculoskeletal system)						
bone	osteosarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

(HPT085)

BATS4

TABLE O 1

NEOPLASTIC LESIONS-INCIDENCE AND
STATISTICAL ANALYSIS: MALE

STUDY No. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : skin/appendage TUMOR : keratoacanthoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	3/50(6.0)	5/50(10.0)	2/50(4.0)
Adjusted rates(b)	8.11	6.38	11.63	4.88
Terminal rates(c)	3/37(8.1)	2/40(5.0)	5/43(11.6)	2/41(4.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7493			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5513			
Fisher Exact test(e)		P = 0.6611	P = 0.3575	P = 0.5000
SITE : subcutis TUMOR : fibroma				
Tumor rate				
Overall rates(a)	2/50(4.0)	11/50(22.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	5.41	25.00	6.98	2.44
Terminal rates(c)	2/37(5.4)	10/40(25.0)	3/43(7.0)	1/41(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2505			
Prevalence method(d)	P = 0.9835			
Combined analysis(d)	P = 0.9545			
Cochran-Armitage test(e)	P = 0.1260			
Fisher Exact test(e)		P = 0.0073**	P = 0.5000	P = 0.6913
SITE : subcutis TUMOR : fibroma, fibrosarcoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	13/50(26.0)	3/50(6.0)	3/50(6.0)
Adjusted rates(b)	5.41	25.00	6.98	4.88
Terminal rates(c)	2/37(5.4)	10/40(25.0)	3/43(7.0)	2/41(4.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4048			
Prevalence method(d)	P = 0.9523			
Combined analysis(d)	P = 0.9265			
Cochran-Armitage test(e)	P = 0.1780			
Fisher Exact test(e)		P = 0.0019**	P = 0.5000	P = 0.5000

STUDY No. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
SEX : MALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	5/50(10.0)	3/50(6.0)	2/50(4.0)	1/50(2.0)
Adjusted rates(b)	8.11	7.50	2.33	0.0
Terminal rates(c)	3/37(8.1)	3/40(7.5)	1/43(2.3)	0/41(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5127			
Prevalence method(d)	P = 0.9834			
Combined analysis(d)	P = 0.9489			
Cochran-Armitage test(e)	P = 0.1349			
Fisher Exact test(e)		P = 0.3575	P = 0.2180	P = 0.1022
SITE : spleen TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	0.0	0.0	0.0	2.44
Terminal rates(c)	0/37(0.0)	0/40(0.0)	0/43(0.0)	1/41(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0179* ?			
Prevalence method(d)	P = 0.1593			
Combined analysis(d)	P = 0.0032***?			
Cochran-Armitage test(e)	P = 0.0033**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.1212
SITE : spleen TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	1/50(2.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	0.0	2.50	0.0	2.44
Terminal rates(c)	0/37(0.0)	1/40(2.5)	0/43(0.0)	1/41(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0179* ?			
Prevalence method(d)	P = 0.2470			
Combined analysis(d)	P = 0.0265*			
Cochran-Armitage test(e)	P = 0.0266*			
Fisher Exact test(e)		P = 0.5000	P = N. C.	P = 0.1212

STUDY No. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS--INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	7.69	2.50	0.0	4.88
Terminal rates(c)	2/37(5.4)	1/40(2.5)	0/43(0.0)	2/41(4.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4797			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9223			
Fisher Exact test(e)		P = 0.3087	P = 0.1212	P = 0.5000
SITE : pancreas TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	3/50(6.0)	2/50(4.0)	0/50(0.0)
Adjusted rates(b)	14.29	6.00	4.65	0.0
Terminal rates(c)	4/37(10.8)	2/40(5.0)	2/43(4.7)	0/41(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9962			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0230*			
Fisher Exact test(e)		P = 0.2435	P = 0.1343	P = 0.0133*
SITE : pancreas TUMOR : islet cell adenoma, islet cell adenocarcinoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	3/50(6.0)	2/50(4.0)	1/50(2.0)
Adjusted rates(b)	16.67	6.00	4.65	2.44
Terminal rates(c)	4/37(10.8)	2/40(5.0)	2/43(4.7)	1/41(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9803			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0636			
Fisher Exact test(e)		P = 0.1589	P = 0.0798	P = 0.0297*

STUDY No. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 SEX : MALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	17/50(34.0)	19/50(38.0)	11/50(22.0)	8/50(16.0)
Adjusted rates(b)	26.67	41.46	25.00	19.51
Terminal rates(c)	9/37(24.3)	16/40(40.0)	10/43(23.3)	8/41(19.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9951			
Prevalence method(d)	P = 0.9763			
Combined analysis(d)	P = 0.9968			
Cochran-Armitage test(e)	P = 0.0152*			
Fisher Exact test(e)		P = 0.4176	P = 0.1327	P = 0.0317*
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	18/50(36.0)	21/50(42.0)	11/50(22.0)	10/50(20.0)
Adjusted rates(b)	28.89	41.46	25.00	19.51
Terminal rates(c)	10/37(27.0)	16/40(40.0)	10/43(23.3)	8/41(19.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8679			
Prevalence method(d)	P = 0.9788			
Combined analysis(d)	P = 0.9905			
Cochran-Armitage test(e)	P = 0.0295*			
Fisher Exact test(e)		P = 0.3410	P = 0.0928	P = 0.0591
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	11/50(22.0)	10/50(20.0)	12/50(24.0)	13/50(26.0)
Adjusted rates(b)	25.64	25.00	27.91	28.26
Terminal rates(c)	9/37(24.3)	10/40(25.0)	12/43(27.9)	11/41(26.8)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.3612			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5187			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.4076

STUDY No. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr.j]
 SEX : MALE

NEOPLASTIC LESIONS--INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : thyroid TUMOR : C-cell adenoma,C-cell carcinoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	11/50(22.0)	14/50(28.0)	14/50(28.0)
Adjusted rates(b)	28.21	25.00	32.56	30.43
Terminal rates(c)	10/37(27.0)	10/40(25.0)	14/43(32.6)	12/41(29.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5210			
Prevalence method(d)	P = 0.3588			
Combined analysis(d)	P = 0.4041			
Cochran-Armitage test(e)	P = 0.5543			
Fisher Exact test(e)		P = 0.5000	P = 0.4100	P = 0.4100
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	8/50(16.0)	4/50(8.0)	4/50(8.0)
Adjusted rates(b)	8.00	17.50	9.30	9.30
Terminal rates(c)	2/37(5.4)	7/40(17.5)	4/43(9.3)	3/41(7.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7360			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5299			
Fisher Exact test(e)		P = 0.1783	P = 0.6425	P = 0.6425
SITE : adrenal gland TUMOR : pheochromocytoma,pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	4/50(8.0)	8/50(16.0)	6/50(12.0)	4/50(8.0)
Adjusted rates(b)	8.00	17.50	9.30	9.30
Terminal rates(c)	2/37(5.4)	7/40(17.5)	4/43(9.3)	3/41(7.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5332			
Prevalence method(d)	P = 0.7373			
Combined analysis(d)	P = 0.7582			
Cochran-Armitage test(e)	P = 0.4896			
Fisher Exact test(e)		P = 0.1783	P = 0.3703	P = 0.6425

STUDY No. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : testis				
TUMOR : interstitial cell tumor				
Tumor rate				
Overall rates(a)	37/50(74.0)	40/50(80.0)	46/50(92.0)	46/50(92.0)
Adjusted rates(b)	86.84	87.50	93.88	97.67
Terminal rates(c)	32/37(86.5)	35/40(87.5)	40/43(93.0)	40/41(97.6)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0420*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0259*			
Fisher Exact test(e)		P = 0.3176	P = 0.0155*	P = 0.0155*

(HPT360A)

BATS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
 (c): Observed tumor incidence at terminal kill.
 (d): Beneath the control incidence are the P-values associated with the trend test.
 Standard method : Death analysis
 Prevalence method : Incidental tumor test
 Combined analysis : Death analysis + Incidental tumor test
 (e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
 ? : The conditional probabilities of the largest and smallest possible outcomes cannot be estimated or this P-value is beyond the estimated P-value.
 ----- : There is no data which should be statistical analysis.
 Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C.:Statistical value cannot be calculated and was not significant.

STUDY No. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 SEX : MALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : ALL SITE				
TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	4/50(8.0)
Adjusted rates(b)	0.0	0.0	0.0	4.88
Terminal rates(c)	0/37(0.0)	0/40(0.0)	0/43(0.0)	2/41(4.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0179* ?			
Prevalence method(d)	P = 0.0163* ?			
Combined analysis(d)	P = 0.0006**?			
Cochran-Armitage test(e)	P = 0.0007**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.0587

(HPT360A)

BAIS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
 (c): Observed tumor incidence at terminal kill.
 (d): Beneath the control incidence are the P-values associated with the trend test.
 Standard method : Death analysis
 Prevalence method : Incidental tumor test
 Combined analysis : Death analysis + Incidental tumor test
 (e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
 ? : The conditional probabilities of the largest and smallest possible outcomes cannot be estimated or this P-value is beyond the estimated P-value.
 ——— : There is no data which should be statistical analysis.
 Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C.: Statistical value cannot be calculated and was not significant.

TABLE O 2

**NEOPLASTIC LESIONS-INCIDENCE AND
STATISTICAL ANALYSIS: FEMALE**

STUDY No. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : subcutis TUMOR : fibroma, fibrosarcoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	3/50(6.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	0.0	4.65	0.0	0.0
Terminal rates(c)	0/40(0.0)	2/43(4.7)	0/45(0.0)	0/43(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8612			
Prevalence method(d)	P = 0.8138			
Combined analysis(d)	P = 0.9470			
Cochran-Armitage test(e)	P = 0.1541			
Fisher Exact test(e)		P = 0.3087	P = 0.5000	P = 0.5000
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma, bronchial carcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	0.0	0.0	4.44	0.0
Terminal rates(c)	0/40(0.0)	0/43(0.0)	2/45(4.4)	0/43(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3511			
Prevalence method(d)	P = 0.5301			
Combined analysis(d)	P = 0.5861			
Cochran-Armitage test(e)	P = 0.7324			
Fisher Exact test(e)		P = N.C.	P = 0.1212	P = N.C.
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	0/50(0.0)	5/50(10.0)
Adjusted rates(b)	0.0	2.33	0.0	6.98
Terminal rates(c)	0/40(0.0)	1/43(2.3)	0/45(0.0)	3/43(7.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4544			
Prevalence method(d)	P = 0.0235*			
Combined analysis(d)	P = 0.0888			
Cochran-Armitage test(e)	P = 0.1335			
Fisher Exact test(e)		P = 0.5000	P = 0.1212	P = 0.3575

STUDY No. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	11/50(22.0)	13/50(26.0)	12/50(24.0)	16/50(32.0)
Adjusted rates(b)	17.50	25.58	26.67	29.55
Terminal rates(c)	7/40(17.5)	11/43(25.6)	12/45(26.7)	12/43(27.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5586			
Prevalence method(d)	P = 0.1367			
Combined analysis(d)	P = 0.1809			
Cochran-Armitage test(e)	P = 0.2661			
Fisher Exact test(e)		P = 0.4076	P = 0.5000	P = 0.1839
SITE : pituitary gland TUMOR : adenocarcinoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	1/50(2.0)	4/50(8.0)	0/50(0.0)
Adjusted rates(b)	5.00	2.22	4.44	0.0
Terminal rates(c)	2/40(5.0)	0/43(0.0)	2/45(4.4)	0/43(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5321			
Prevalence method(d)	P = 0.9071			
Combined analysis(d)	P = 0.8971			
Cochran-Armitage test(e)	P = 0.2335			
Fisher Exact test(e)		P = 0.5000	P = 0.3389	P = 0.2475
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	13/50(26.0)	14/50(28.0)	16/50(32.0)	16/50(32.0)
Adjusted rates(b)	22.50	26.67	31.11	29.55
Terminal rates(c)	9/40(22.5)	11/43(25.6)	14/45(31.1)	12/43(27.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6078			
Prevalence method(d)	P = 0.2705			
Combined analysis(d)	P = 0.3429			
Cochran-Armitage test(e)	P = 0.5555			
Fisher Exact test(e)		P = 0.5000	P = 0.3299	P = 0.3299

STUDY No. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	9/50(18.0)	7/50(14.0)	5/50(10.0)
Adjusted rates(b)	17.50	20.93	15.56	10.64
Terminal rates(c)	7/40(17.5)	9/43(20.9)	7/45(15.6)	3/43(7.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8705			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3378			
Fisher Exact test(e)		P = 0.3929	P = 0.6129	P = 0.3798
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	9/50(18.0)	11/50(22.0)	9/50(18.0)	5/50(10.0)
Adjusted rates(b)	20.00	25.58	20.00	10.64
Terminal rates(c)	8/40(20.0)	11/43(25.6)	9/45(20.0)	3/43(7.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000 ?			
Prevalence method(d)	P = 0.9483			
Combined analysis(d)	P = 0.9614			
Cochran-Armitage test(e)	P = 0.1286			
Fisher Exact test(e)		P = 0.4016	P = 0.6024	P = 0.1940
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	5/50(10.0)	2/50(4.0)	6/50(12.0)	7/50(14.0)
Adjusted rates(b)	11.63	4.65	13.33	16.28
Terminal rates(c)	4/40(10.0)	2/43(4.7)	6/45(13.3)	7/43(16.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.1305			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2227			
Fisher Exact test(e)		P = 0.2180	P = 0.5000	P = 0.3798

STUDY No. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr.j]
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : uterus TUMOR : adenocarcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	0/50(0.0)	4/50(8.0)
Adjusted rates(b)	0.0	0.0	0.0	4.65
Terminal rates(c)	0/40(0.0)	0/43(0.0)	0/45(0.0)	2/43(4.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1033			
Prevalence method(d)	P = 0.0157* ?			
Combined analysis(d)	P = 0.0089**			
Cochran-Armitage test(e)	P = 0.0074**			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.1811
SITE : uterus TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	1/50(2.0)	0/50(0.0)	4/50(8.0)
Adjusted rates(b)	0.0	2.33	0.0	4.65
Terminal rates(c)	0/40(0.0)	1/43(2.3)	0/45(0.0)	2/43(4.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1033			
Prevalence method(d)	P = 0.0827			
Combined analysis(d)	P = 0.0272*			
Cochran-Armitage test(e)	P = 0.0295*			
Fisher Exact test(e)		P = 0.7525	P = 0.5000	P = 0.1811
SITE : mammary gland TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	8/50(16.0)	11/50(22.0)	7/50(14.0)	2/50(4.0)
Adjusted rates(b)	17.50	23.40	14.89	4.65
Terminal rates(c)	7/40(17.5)	10/43(23.3)	5/45(11.1)	2/43(4.7)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9962			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0152*			
Fisher Exact test(e)		P = 0.3055	P = 0.5000	P = 0.0458*

STUDY No. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 11

Group Name	Control	250 ppm	1000 ppm	4000 ppm
SITE : mammary gland				
TUMOR : adenoma, fibroadenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	9/50(18.0)	11/50(22.0)	10/50(20.0)	3/50(6.0)
Adjusted rates(b)	20.00	23.40	21.28	6.98
Terminal rates(c)	8/40(20.0)	10/43(23.3)	8/45(17.8)	3/43(7.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9922			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0266*			
Fisher Exact test(e)		P = 0.4016	P = 0.5000	P = 0.0606

(HPT360A)

BAIS4

(a): Number of tumor-bearing animals/number of animals examined at the site.

(b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.

(c): Observed tumor incidence at terminal kill.

(d): Beneath the control incidence are the P-values associated with the trend test.

Standard method : Death analysis

Prevalence method : Incidental tumor test

Combined analysis : Death analysis + Incidental tumor test

(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.

? : The conditional probabilities of the largest and smallest possible outcomes can not be estimated or this P-value is beyond the estimated P-value.

----- : There is no data which should be statistical analysis.

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

N.C.:Statistical value cannot be calculated and was not significant.

TABLE P 1

HISTOPATHOLOGICAL FINDINGS:
METASTASIS OF TUMOR: MALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
subcutis	metastasis:peripheral nerve tumor		<50> 1	<50> 0	<50> 0	<50> 0
{Respiratory system}						
lung	leukemic cell infiltration		<50> 4	<50> 3	<50> 2	<50> 0
	metastasis:thyroid tumor		0	0	0	1
	metastasis:peritoneum tumor		0	0	1	0
	metastasis:large intestine tumor		1	0	0	0
	metastasis:pleura tumor		0	0	2	0
	metastasis:thymus tumor		0	1	0	0
{Hematopoietic system}						
bone marrow	leukemic cell infiltration		<50> 3	<50> 1	<50> 0	<50> 1
lymph node	leukemic cell infiltration		<50> 2	<50> 1	<50> 1	<50> 0
	metastasis:large intestine tumor		1	0	0	0
thymus	metastasis:pleura tumor		<50> 0	<50> 0	<50> 1	<50> 0
{Circulatory system}						
heart	leukemic cell infiltration		<50> 1	<50> 0	<50> 1	<50> 0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
(Circulatory system)						
heart	metastasis:thymus tumor		<50> 0	<50> 1	<50> 0	<50> 0
(Digestive system)						
stomach	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
	metastasis:large intestine tumor		1	0	0	0
small intes	metastasis:large intestine tumor		<50> 1	<50> 0	<50> 0	<50> 0
liver	leukemic cell infiltration		<50> 4	<50> 3	<50> 1	<50> 1
pancreas	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
	metastasis:large intestine tumor		1	0	0	0
(Urinary system)						
kidney	leukemic cell infiltration		<50> 2	<50> 1	<50> 0	<50> 0
(Endocrine system)						
pituitary	metastasis:peripheral nerve tumor		<50> 1	<50> 0	<50> 0	<50> 0
(Nervous system)						
brain	leukemic cell infiltration		<50> 1	<50> 0	<50> 1	<50> 0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 3

		Group Name No. of Animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
Organ	Findings					
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	metastasis:spinal cord tumor		1	0	0	0
spinal cord			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	0
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	1
	metastasis:peripheral nerve tumor		1	0	0	0
{Musculoskeletal system}						
muscle			<50>	<50>	<50>	<50>
	metastasis:subcutis tumor		0	1	0	0
{Body cavities}						
mediastinum			<50>	<50>	<50>	<50>
	metastasis:pleura tumor		0	0	1	0
peritoneum			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
	metastasis:large intestine tumor		1	0	0	0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

TABLE P 2

HISTOPATHOLOGICAL FINDINGS:
METASTASIS OF TUMOR: FEMALE

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 4

Group Name No. of Animals on Study		Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
Organ	Findings				
{Respiratory system}					
lung	leukemic cell infiltration	<50> 3	<50> 1	<50> 0	<50> 3
	metastasis:liver tumor	0	1	0	0
	metastasis:uterus tumor	1	0	0	0
{Hematopoietic system}					
bone marrow	leukemic cell infiltration	<50> 1	<50> 1	<50> 0	<50> 1
	lymph node	<50> 1	<50> 2	<50> 0	<50> 0
	metastasis:uterus tumor	1	0	1	1
	metastasis:thyroid tumor	1	0	0	0
	metastasis:lung tumor	0	0	1	0
spleen	metastasis:uterus tumor	<50> 0	<50> 0	<50> 0	<50> 1
{Circulatory system}					
heart	leukemic cell infiltration	<50> 0	<50> 0	<50> 0	<50> 1
	metastasis:lung tumor	0	0	1	0
{Digestive system}					
stomach	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 1

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study	Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
{Digestive system}						
small intes			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		0	0	0	1
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	1	0	3
	metastasis:uterus tumor		0	0	0	1
	metastasis:adrenal tumor		0	0	0	1
	metastasis:thyroid tumor		1	0	0	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:uterus tumor		0	0	0	1
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	metastasis:peripheral nerve tumor		0	1	0	0
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
	metastasis:liver tumor		0	1	0	0
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	1	0	0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0684
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 6

Group Name No. of Animals on Study		Control 50	250 ppm 50	1000 ppm 50	4000 ppm 50
Organ	Findings				
(Reproductive system)					
uterus		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	0	1
(Nervous system)					
brain		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	0	1
	metastasis:pituitary tumor	2	1	0	0
	metastasis:peripheral nerve tumor	0	1	0	0
(Special sense organs/appendage)					
Harder gl		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0
	metastasis:peripheral nerve tumor	0	1	0	0
(Musculoskeletal system)					
muscle		<50>	<50>	<50>	<50>
	metastasis:subcutis tumor	0	1	0	0
(Body cavities)					
pleura		<50>	<50>	<50>	<50>
	metastasis:lung tumor	0	0	2	0
mediastinum		<50>	<50>	<50>	<50>
	metastasis:lung tumor	0	0	1	0

< a > a : Number of animals examined at the site
 b b : Number of animals with lesion

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 7

		Group Name	Control	250 ppm	1000 ppm	4000 ppm
		No. of Animals on Study	50	50	50	50
Organ	Findings					
{Body cavities}						
peritoneum	metastasis:uterus tumor		<50> 0	<50> 0	<50> 1	<50> 0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					
(JPT150)						BATS4

TABLE Q 1

HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC
LESIONS IN JAPAN BIOASSAY RESEARCH CENTER:
F344/DuCr1Cr1j MALE RATS

TABLE Q 1 HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC LESIONS IN JAPAN BIOASSAY RESEARCH CENTER : F344/DuCr1Cr1j MALE RAT

Organs Tumors	No. of animals examined	No. of animals bearing tumor	Incidence (%)	Min. - Max. (%)
Spleen	2748			
Hemangioma		5	0.2	0 - 2
Hemangiosarcoma		7	0.3	0 - 4
Hemangioma + Hemangiosarcoma		12	0.4	0 - 4
Subcutis	2748			
Hemangioma		3	0.1	0 - 2
All organ	2748			
Hemangioma		11	0.4	0 - 2
Hemangiosarcoma		8	0.3	0 - 4
Hemangioma + Hemangiosarcoma		19	0.7	0 - 4
Testis	2747			
Interstitial cell tumor		2282	83.1	56 - 98

55 carcinogenicity studies examined in Japan Bioassay Research Center were used.

Study No. : 0043, 0059, 0061, 0063, 0065, 0067, 0095, 0104, 0115, 0130, 0141, 0158, 0162, 0189, 0205, 0210, 0224, 0242, 0246, 0267, 0269, 0278, 0284, 0288, 0294, 0296, 0318, 0328, 0342, 0347, 0365, 0371, 0396, 0399, 0401, 0407, 0417, 0421, 0437, 0448, 0457, 0461, 0497, 0535, 0560, 0579, 0581, 0610, 0612, 0641, 0667, 0675, 0686, 0691, 0704

TABLE Q 2

HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC
LESIONS IN JAPAN BIOASSAY RESEARCH CENTER:
F344/DuCr1Cr1j FEMALE RATS

TABLE Q 2 HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC LESIONS IN JAPAN BIOASSAY RESEARCH CENTER : F344/DuCr1Cr1j FEMALE RAT

Organs Tumors	No. of animals examined	No. of animals bearing tumor	Incidence (%)	Min. - Max. (%)
Uterus	2544			
Adenoma		7	0.3	0 - 2
Adenocarcinoma		15	0.6	0 - 4
Adenoma + Adenocarcinoma		22	0.9	0 - 4
Spleen				
Mononuclear cell leukemia	2547	314	12.3	2 - 26

51 carcinogenicity studies examined in Japan Bioassay Research Center were used.

Study No. : 0043, 0059, 0061, 0063, 0065, 0067, 0095, 0104, 0115, 0130, 0141, 0158, 0162, 0189, 0205, 0210, 0224, 0242, 0246, 0267, 0269, 0278, 0284, 0296, 0303, 0318, 0328, 0342, 0347, 0365, 0371, 0399, 0401, 0417, 0421, 0437, 0448, 0457, 0461, 0497, 0535, 0560, 0579, 0610, 0612, 0641, 0667, 0675, 0686, 0691, 0704

TABLE R 1

CAUSE OF DEATH: MALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : MALE

COUSE OF DEATH (SUMMARY)
(0-105W)

PAGE : 1

Group Name	Control	250 ppm	1000 ppm	4000 ppm
Number of Dead and Moribund Animal	13	10	7	9
no microscop confirm	2	0	1	0
digestive sy les	1	1	0	0
urinary sy les	0	0	1	0
urinary retention	0	0	0	1
tumor d:leukemia	2	0	1	1
tumor d:subcutis	0	2	0	1
tumor d:thymus	0	1	0	0
tumor d:spleen	0	0	0	2
tumor d:oral cavity	0	0	0	1
tumor d:large intes	1	0	0	0
tumor d:pituitary	5	4	0	2
tumor d:thyroid	0	1	0	0
tumor d:adrenal	0	0	2	0
tumor d:spinal cord	1	0	0	0
tumor d:periph nerv	1	0	0	0
tumor d:Zymbal gl	0	1	0	0
tumor d:pleura	0	0	2	0
tumor d:peritoneum	0	0	0	1

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TABLE R 2

CAUSE OF DEATH: FEMALE

STUDY NO. : 0684
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : FEMALE

COUSE OF DEATH (SUMMARY)
(0-105W)

PAGE : 2

Group Name	Control	250 ppm	1000 ppm	4000 ppm
Number of Dead and Moribund Animal	10	7	5	7
thrombosis	1	0	0	0
tumor d:leukemia	3	1	0	2
tumor d:subcutis	1	1	0	0
tumor d:lung	0	0	1	0
tumor d:liver	0	1	0	0
tumor d:pituitary	3	2	2	2
tumor d:thyroid	1	0	0	0
tumor d:uterus	1	0	2	3
tumor d:brain	0	1	0	0
tumor d:periph nerv	0	1	0	0

(B10120)

BATS4