アクリル酸=2-ヒドロキシエチルのラットを用いた経口投与によるがん原性試験(混水試験)報告書

試験番号:0347

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APPENDIX A 1

CLINICAL OBSERVATION: SUMMARY, RAT: MALE

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration We	eek-day											
		1-7	2-7	3-7	47	5-7	6–7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
EATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0.	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	istration R	eek-day											
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	227	23-7	24-7	25-7	26-7	27-7	28-7
ЕАТН	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21111	320 ppm	ŏ	. 0	0	0	0	Ŏ	Ô	0	Õ	0	0 .	0	0	0
	800 ppm	ő	Ö	0	0	0	0	Ö	0	0	0	Ö	Ŏ	Ö	0
	2000 ppm	ō	o	0	0	0	o	ō	ō	o	ō	0.	0	o	0
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
ATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0 .	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admin	istration W	eek-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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
ATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	2000 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
	320 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0 .	0	0	. 0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

STUDY NO. : 0347

REPORT TYPE : A1 104

linical sign	Group Name	Admini	stration W	eek-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
EATII	Control	0	0	0	0	0	0	0	0	0		0	0	0	0
MIIII.	320 ppm	Ö	0	0	0	0	Õ	Ö	Ö	ō	ō	0	0	0	0
	800 ppm	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0 0	0	0 0	0 0
	800 ppm	0	0	0 0	0	0 0	0 0	0 0	0	0	0	0	0	0	0
	2000 ppm	U	U	U	U	U	U	U	U	U	U	v	U	U	U
ATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
-		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	U

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

SEX - MALE															TROD
Clinical sign	Group Name	Admin	istration W	leek-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
EATII	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	800 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	2
	2000 ppm	1	1	1	1	1	1	2	. 2	3	3	3	3	3	4
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	1	1	1	I	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
,	. 2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	320 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	800 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	4
	2000 ppm	4	4	4	4	5	5	5	5	5	5	5	5	5	5
ORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	, 0	0	0	0	0	0	0	0	0
TUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
PARALYTIC GAIT	Control	1	1	1	1	1	i	1	1	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
					۰	•	•		0	0	2	2	9	_	c
EATII	Control	1	1	1	2	2	2	2 3	2 3	2	3 3	3 3	3 3	5 3	6 3
	320 ppm	3	3	3	3	3	3			3	•				
	800 ppm	4	5	5	6	6	7	7	7	7	8	8	8	8	8
	2000 ppm	5	5	6	6	6	6	6	6	6	6	6	6	6	6
DRIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	2	2	2	2	3	3
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	800 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
	2000 ppm	0	1	1	1	1	1	1	2	2	4	4	4	4	5
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	. 1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
RONE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	1	0	0	0	0	Ö	0	0
ATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	1	2	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	1	1	0	0	0	0	1	0	0	0	0	0	0	0
ASTING	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	0	0	0	0	0	1	1	1	1
	2000 ppm	0	1	0	0	0	0	0	0	1	0	1	1	2	2

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

Clinical sign	Group Name	Admin	istration '	Week-day _				 		 	
-	-	99-7	100-7	101-7	102-7	103-7	104-7				
				<u> </u>		-				 	
DEATH	Control	6	6	6	7	7	7				
	320 ppm	4	5	6	6	6	6				
	800 ppm	9	10	10	10	11	12				
	2000 ppm	6	7	7	8	9	9				
MORIBUND SACRIFICE	Control	3	3	3	3	3	3				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	5	5	6	6	6	6				
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
PRONE	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
LATERAL	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
HUNCHBACK POSITION	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	1				
PARALYTIC GAIT	Control	0.	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	1	0	0	0	0	0				
	2000 ppm	0	0	0	0	. 0	0				
WASTING	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0		•		
	800 ppm	1	1	1	0	0	0				
	2000 ppm	2	3	2	2	1	1				

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE															PAGE :
Clinical sign	Group Name	Admini	stration W	eek-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
								•		•	•	•	•	•	0
SOILED	Control	0	0	0	0	0	0	0	0 0	0 0	0	0 0	0 0	0	0 0
	320 ppm	0	0	0	0	0	•	•	-	-	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0				
	2000 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIORIBLITION	320 ppm	Ŏ	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIE OFNOTTI	320 ppm	0	0	Ö	0	0	Ŏ	0	Ō	0	0	0	0	0	0
	800 ppm	0	Õ	0	Ö	ŏ	Ö	ő	ŏ	Ö	0	0	0	Ō	Ö
	2000 ppm	0	0	Ö	0	0	0	0	0	1	1	1	1	1	1
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
On I I I I I I I I I I I I I I I I I I I	320 ppm	0	0	0	0	0	0	0	0	Ö	0	0	0	0	0
	320 ppm 800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ō	Ō
	2000 ppm	0	0	0	0	0	0	0	0	ő	ő	ō	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTRACT OF MOTITI	320 ppm	0	0	0	0	0	0	0	0	Ő	0	0	ŏ	0	ő
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	Ö	0	ő
		0	0	0	0	0	0	0	0	1	1	1	1	1	1
	2000 ppm	U	U	U	U	U	U	v	U	1		1	1		1

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JOILED	320 ppm	0	0	0	0	0	0	0.	0	Õ	Ö	0	0	0	ő
	800 ppm	0	0	0	0	0	Ö	0	0	Ö	0	ő	0	0	ő
	2000 ppm	0	0	0	0	0	Ö	Ö	Ö	Ö	ő	o O	0	0	0
	••														
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
OULD THE OUTTHEEN	320 ppm	0	0	0	0	0	Ŏ	0	0	0	0	Ő	0	Ö	Ö
	320 ppm 800 ppm	0	0	0	0	0	0	0	ő	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	U	U	U	U	v	V	U	•	·	Ü	v	v	v	V
XOPIITHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
ACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ME OINOITI	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm 800 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2000 ppm 2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	1	L	1	1,	1	ı	T	1	1	1	ı	1		1
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2000 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
oracina oracini	320 բբա	0	Ô	0	0	0	Ö	0	Ö	Õ	0	0	0	0	0
	800 ppm	0	0	0	0	ő	ő	0	0	Ö	ő	0	ő	Ŏ	Ŏ
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	ı	1		1			1		*	•	•		•	•

CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj ALL ANIMALS

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-dav											
		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
											•	•	•	^	^
OILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	2	2	0	0	0	0	0	0
XOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
ACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0.	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YE OPACITY	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	320 բթտ	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	2000 ppm	1	2	2	2	2	2	2	2	2	2	2	2	2	2
ATARACT	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	2000 ppm	0	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
	320 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO.: 0347

SEX : MALE

Clinical sign	Group Name	Admini	istration W	eek-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
OTT ED	0 - 4- 1	•	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	0	0	0
	320 ppm	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррш	U	U	U	U	U	U	U	V	U	U	v	U	U	v
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0 .	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XOPIITIIALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAOI III III DAIOG	320 ppm	0	0	0	0	0	0	0	0	0	ő	Ö	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	i	1	1	1	1	1
	2000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LACRYMATION	Control	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	1	1	1	1	2	2	2	2	2	2	3	3	3	3
	800 ppm	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	2000 ppm	2	2	3	4	4	4	4	4	4	4	4	4	4	4
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
OHIMMOI	320 ppm	0	0	0	0	1	1	1	1	1	1	2	2	2	2
	320 ppm 800 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2000 ppm	1	1	1	3	3	3	3	3	3	3	3	3	3	3
annut en 1 at				•	•	•		•	•	^	^		^	•	
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	i.	1	1
	800 ppm	0	0	0	0	0	.0	0	0	0	1 1	1 1	1	1 1	J. 1
	2000 ppm	1	1	2	1	1	1	1	1	1	1	1	1	1	1

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : MALE

Clinical sign	Group Name	Admini	stration We	ek-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
GOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPIITHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	3	3	3	3	3	3	3	3	3	3	4	4	5	5
	800 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	4
	2000 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	2	2	2	2	2	2	3	3	3	3	4	4	5	5
	800 ppm	2	2	2	3	3	3	3	3	3	3	3	3	3	4
	2000 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1 .	1

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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	Control	0	0	0	0	0	0	0	0	0	0	0	0 -	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	2000 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
	320 ррт	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	2000 ppm	2	2	2	2	2	2	2	2	2	2	2	1	1	1
LACRYMATION	Control	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	320 ppm	5	5	5	5	5	5	5	4	5	5	5	5	5	5
	800 ppm	4	5	5	5	5	5	5	5	5	5	5	5	5	5
	2000 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	5
CATARACT	Control	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	320 ppm	5	5	5	5	5	5	5	4	5	5	5	5	5	5
	800 ppm	4	5	5	5	5	5	5	5	5	5	5	5	5	5
	2000 ppm	2	2	2	2	2	2	2	2	2	3	3	4	4	5
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

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SEX : MALE

SEX - MALE											`				1 405 - 10
Clinical sign	Group Name	Admin	istration V	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
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	2
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	1	0	0	2	2	1	1	1
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0 -	1	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	2	1	1	1	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPIITIIALMOS	Control	0	0	0	0	0	.0	0	0	0	0	0	0	0	0 .
	320 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	1
LACRYMATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	2	3	3	3	3	3	3	3	3	3	4	4	4	4
	320 ppm	5	5	5	5	5	6	6	6	7	7	7	7	7	7
	800 ppm	5	5	5	5	5	4	4	4	4	4	4	4	4	4
	2000 ppm	5	5	5	6	6	6	6	6	6	5	4	4	4	4
CATARACT	Control	2	3	3	3	3	3	3	3	3	3	4	4	4	4
	320 ppm	5	5	5	5	5	6	6	6	7	7	7	7	7	7
	800 ppm	5	5	5	5	5	4	4	4	4	4	4	4	4	4
	2000 ppm	5	5	5	6	6	6	6	6	6	5	4	4	4	4
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admin	istration \	Week-day							
Timiodi Sign	or out trains	99-7	100-7	101-7	102-7	103-7	104-7	CARLO			
											*
SOILED	Control	0	0	0	0	0	0				
ROTPED	320 ppm	0	0	0	0	0	0				
	800 ppm	1	1	1	1	1	1				
	2000 ppm	0	0	0	0	0	0				
	2000 ppiii	V	V	U	Ü	v	V				
ILOERECTION	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	1	1	1	1	1	1				
SOILED PERI GENITALIA	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	1	2	4				
	2000 ppm	ŭ	v	ŭ	-	_	-				
XOPIITIIALMOS	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	1	1	1	1	1	1				
LACRYMATION	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
PUP ADIATMU	0 1 1			4	4	4	4				
EYE OPACITY	Control	4	4	4 7	4 7	4	4				
	320 ppm	7	7			8	8				
	800 ppm	4	4	4	4	4	4				
	2000 ppm	4	4	4	4	4	4				
CATARACT	Control	4	4	4	4	4	4				
	320 ppm	7	7	7	7	8	8				
	800 ppm	4	4	4	4	4	4				
	2000 ppm	4	4	4	4	4	4				
CORNEAL OPACITY	Control	0	0	0	0	0	0				
COMMEND OFFICE I	320 ppm	0	0	Ő	o O	0	Ö				
	800 ppm	0	0	0	0	0	ő				
		1	1	1	1	1	ĭ		•		
	2000 ppm	1	1	1	1	1	i				

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration We	eek-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
					_				•		_	•	•	•	^
INTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	ő	ő	Õ	Õ	0	Õ	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	Ö	Ö	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	Ŏ	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	Ő	0	0	0	0	Ö	0	Ŏ	ő	0	0	0	Ŏ	Ö
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	o o	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

linical sign	Group Name	Admini	stration W												
		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
							•		•	0	^	^	0	0	0
NTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0			_	-		
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0 .	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

linical sign	Group Name	Admin	istration W	eek-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
ITERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VIERTOS CHAMBER OFACTIT	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	ō	Ô
	novo pp	·	•	•		-	-								
KTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ooo ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 րրտ	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2000 ppm	0	0	0	1	1	1	2	2	2	2	2	2	2	2
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. PERI MOUTII	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
							·								
NTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	2000 ррт	0	0	1	1	1	1	0	0	1	1	0	0	0	1
XTERNAL MASS	Control	1	1	1	1	1	1	2	2	1	1	1	1	1	1
	320 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	2	2	2	2	2	2	2	2	1	1	1	1	1	1
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	2000 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
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	1	1	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj ALL ANIMALS

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admin	istration P	Veek-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
ITERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WIDNIOS STRABBON STROTTI	320 ppm	Ö	Õ	Ů.	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	1	1	1	1	1	1	1	1	1	1	1	0	0	1
TTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	0	0	1	1	1
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	2	3	3
	800 ppm	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
NOSE	Control	0	0	0	0	0	0 .	0	0	0 ,	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0
	2000 ppm	0	0	0	0	0	0	U	0	U	U	U	U	U	U
. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0 *	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0
	800 ppm	0	0	0	0	0 0	0 0	0 0	0 0	0	0	0	0	0	0
	2000 ppm	0	U	U	U	U	U	U	U	U	υ	U	U	U	U
ORAL CAVITY	Control	0	0	0	0	0	0	0	.0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0
	2000 բթա	0	0	0	0	0	0	0	0	U	U	U	U	v	U
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	800 ppm	0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0
	2000 ppm	0	0	0	0	0	0	U	U	U	Ų	U	U	U	U

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
INTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	1	0	0	0	0	0	0	0	0	0	0	0	1	0
XTERNAL MASS	Control	2	3	4	4	5	5	5	6	7	8	8	9	7	6
	320 ppm	4	5	5	5	5	6	6	6	7	7	9	9	9	11
	800 ppm	2	2	4	4	4	4	4	5	5	6	6	6	7	8
	2000 ppm	2	1	1	2	2	2	2	2	2	3	3	3	4	5
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	1	1	1	2	2	3	3	3	3	3	3	4
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
s. eye	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI MOUTII	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
I. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1

CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj ALL ANIMALS

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admin	istration	Week-day _				 	
		99-7	100-7	101-7	102-7	103-7	104-7		
									**
VTERIOS CHAMBER OPACITY	Control	1	1	1	1	1	1		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
TERNAL MASS	Control	8	9	11	11	11	11		
	320 ррт	12	11	10	10	11	12		
	800 ppm	7	6	7	8	8	7		
	2000 ppm	5	6	7	7	7	7		
TERNAL MASS	Control	0	0	0	1	1	1		
	320 ppm	0	1	0	1	1	1		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
NOSE	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	3	2	2	2	2	2		
	2000 ppm	0	0	0	0	0	0		
ЕУЕ	Control	0	0	0	0	0	0		
	320 ppm	1	1	1	1	1	1		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
PERI MOUTH	Control	0	0	0	0	0	0		
	320 ppm	2	2	1	1	0	0 .		
	800 ppm	1	1	1	1	1	0		
	2000 ppm	0	0	0	0	1	1		
ORAL CAVITY	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ррт	0	0	1	1	1	1		
MANDIBULAR	Control	0	0	0	0	0	0		
	.320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	1	1	1	1	1	1		

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

Clinical sign	Group Name	Admini	stration We	eek-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
I. EAR	Control	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. PERI EAR	Control	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	, 0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. NECK	Control	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
,	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0.	0	0	0	0	0	. 0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	. 320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-day _											
	- Albanya - Alba	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	28-1
CAD	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. EAR	Control 320 ppm	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
	800 ppm 2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 քիա	U	V	U	v	v	V	V	v	v	·	v	v	v	·
I. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	C
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	

ANIMAL : RAT F344/DuCrj

STUDY NO. : 0347

REPORT TYPE: A1 104

SEX : MALE

Clinical sign	Group Name	Admin	istration W	eek-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-
													•		
I. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0 -	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
``	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
I. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
								•	•	•	•	2	^	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0		0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	U	U	U	0	U
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	. 0	. 0	0	0	0	0
	2000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 թբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	C
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C

Administration Week-day _

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

Group Name

Control

320 ppm

800 ppm

2000 ppm

Control

320 ppm

800 ppm

2000 ppm

Control

320 ррт

800 ppm

2000 ppm

REPORT TYPE: A1 104

SEX : MALE

Clinical sign

		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
w. Ear	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. DAK	320 ppm	0	0	0	0	0	0	0	0	Ŏ	0	0	0	. 0	0
	800 ppm	0	Õ	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	ō	ő	ŏ	0	0	0	0	0	1	1	. 1	1	1	1
A. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
A. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0 .	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PAGE: 29

M. ABDOMEN

M. ANTERIOR. DORSUM

M. POSTERIOR DORSUM

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
											_	_	_		
. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
I. PERI EAR	Control	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	•
	2000 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
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0 0	0	(
	2000 ppm	0	0	0	0	0	0	0	.0	0	0	0	U	0	· ·

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : MALE

Clinical sign	Group Name		istration W												
		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
I. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
I. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1. NECK	Control	1	1	1	1	1	1	1	2	2	1	1	1	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	1	1	1	2	2	2	2	2	2	2	2	2	2
	320 ppm	0	1	1	1	1	1	1	1	1	2	2	2	2	3
	800 ppm	1	1	1	2	2	1	1	1	1	1	1	1	1	1
	2000 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	3	3	3	2	1
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	2	2
M. ANTERIOR. DORSUM	Control	0	0	1	1	1	1	1	1	2	2	2	3	3	3
	320 ppm	0	0	0	0	0	1	1	1	1	1	1	1	2	2
	800 ppm	0	0	1	1	1	1	1	2	2	2	2	2	2	2
	2000 ppm	1	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
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : MALE

Clinical sign	Group Name	Admin	istration	Week-day _				 	
		99-7	100-7	101-7	102-7	103-7	104-7		
							· <u></u>	 	
I, EAR	Control	0	0	0	0	0	0		
a. DAK	320 ppm	1	1	1	1	1	1		
	800 ppm	0	0	Ô	0	0	0		
		0	0	0	0	0	ő		
	2000 ppm	U	Ū	v	· ·	V	V		
. PERI EAR	Control	0	0	0	1	1	1		
	320 ppm	0	0	0	0	0	1		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
I. NECK	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
	Boot pp								
M. FORLIMB	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	1	1	1	1		
I. BREAST	Control	2	2	2	2	2	2		
	320 ppm	4	3	3	3	3	3		
	800 ppm	1	1	2	2	2	2		
	2000 ppm	0	0	0	0	0	0		
1. ABDOMEN	Control	1	1	1	0	0	0		
TODOWEN	320 ppm	1	1	1	1	1	1		
	800 ppm	0	0	0	ī	1	ī		
	2000 ppm	2	2	2	2	2	2		
M. ANTERIOR. DORSUM	Control	3	4	4	4	4	4		
	320 ppm	2	2	2	2	2	2		
	800 ppm	1	1	1	1	1	1		
	2000 ppm	1	2	2	2	2	2		
M. POSTERIOR DORSUM	Control	0	0	1	1	1	1		
	320 ppm	1	1	1	1	1	1		
	800 ppm	ī	1	1	1	1	1		
	2000 ppm	1	1	1	1	1	2		

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : MALE

Clinical sign	Group Name		stration We	eek-day											
		1-7	2-7	3-7	4-7	5–7	6-7	77	8-7	9-7	10-7	11-7	12-7	13-7	14-7
I. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. ANUS	Control	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	.0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0-	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

linical sign	Group Name	Admini	stration W												
		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
	a . 1	•		•	•	0	0	0	0	0	0	0	0	0	0
. HINDLIMB	Control	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0		-	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	0	0	0	0	U	U	U	U	U	Ü	Ü	v	v	v
ANUS .	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(12milit	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101.02.102	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	o	0	0	0	0	0	0	0	0	0	0	0	0	0
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3,00111	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	Ö	Õ	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Control of the control of the	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	ő	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 թթա	o	ō	0	ō	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 mgg 320	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	Ö	Ŏ	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	ō	ō	0	0	0	0	0	0	0	0	0	0	0
	PF														

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admin	istration W	eek-day _											
	4.50	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
.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	C
AUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	ι
EMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

STUDY NO. : 0347

Clinical sign	Group Name	Admin	istration W	leek-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. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	Λ	٨	n	Ω	n	Ω	Ω	Λ	Ω	Ω	Ω	0	0	0

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IRREGULAR BREATHING

2000 ppm

Control 320 ppm

800 ppm

2000 ppm

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

Clinical sign	Group Name	Admini	istration \	eek-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
													,	4	•
.HINDLIMB	Control	1	1	1	1	1	1	1	1	1	1	1	ı	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
AUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
EMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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. HINDLIMB	Control	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ó	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	320 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	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
	320 ppm	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	800 ppm	0	0	0	0	0	0	1	1	1	1	1	2	2	2
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
•	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	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	(
	320 թթա	0	0	0	0	. 0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	eek-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
. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	i	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
.TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	2	1
	320 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0 -	0	0	0	0	0	0	0
	2000 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
AUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	2000 ppm	0	0	0	0	0	0	1	1	1	1	0	0	0	0
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0 .	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

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Clinical sign	Group Name	Admin	istration \	Week-day _				 ·	
	•	99-7	100-7	101-7	102-7	103-7	104-7		
*****							***************************************	 	
M. HINDLIMB	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
A. ANUS	Control	0	0	0	0	0	0		
a. raves	320 րթա	Í	1	1	1	1	1		
	800 ppm	0	ò	0	0	Ō,	Ō		
		0	0	0	0	0	0		
	2000 ppm	U	U	U	U	v	U		
M. TAIL	Control	2	2	3	3	3	3		
	320 ppm	1	1	1	1	2	2		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
NEMIA	Control	1	1	1	1	1	1		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	1	1		
	2000 ppm	0	0	0	0	0	0		
JAUNDISE	Control	0	0	0	0	0	0		
J. HOLLD I DD	320 ppm	1	0	Ō	1	1	1		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	ő		
	2000 ppm	V	V	V	v	v			
CRUSTA	Control	1	1	1	1	1	1		
	320 ppm	2	. 2	3	3	3	3		
	800 ppm	4	4	4	4	4	4		
	2000 ppm	0	0	0	0	1	1		
IEMORRHAGE	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
IRREGULAR BREATHING	Control	0	0	0	0	1	1		
THE COMME DIMENTIAL TO	320 ppm	ő	0	Õ	0	0	0		
	800 ppm	0	0	0	0	ő	Ö		
	2000 ppm	0	0	0	0	Ö	1		

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

linical sign	Group Name	Admini	stration We	eek-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
SPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : MALE

Clinical sign Group Name Administration Week-day _ 16-7 17-7 18~7 19-7 21-7 23-7 24-7 25-7 26-7 27-7 28-7 20-7 22-7

PAGE: 42

		10-1	10 7	11 1	10 1	13 1	20 1		22 1	20 1	211	20 1	20 1		20 1
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 рри	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190) BAIS 3 CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 104 ALL ANIMALS

STUDY NO. : 0347

SEX : MALE

PAGE: 43

linical sign	Group Name	Admini	istration W	eek-dav											
		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
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
LLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
ALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
IGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	. 0	0	0 -	0 .	0	0	0	0	0
	2000 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
BNORMAL TEMP	Control	0.	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : MALE

linical sign	Group Name	Admini	istration W	eek-day											
	14.75	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
COLD ATTODY COUNTY ADVOD	C - 41	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0
ESPIRATORY SOUND ABNOR	Control 320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm 800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0
	2000 ppm	0	0	0	0	0	0	0	0	0	ŏ	Ö	ō	Ō	0
	2000 pp	•													
NORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORMAL RESPIRA, SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONALID RESI INT. SOUTH	320 ppm	0	0	0	Ō	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					_		•			^	^	0	^	^	0
ELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
	2000 ppm	0	0	0	0	0	0	0	0	U	0	U	U	U	U
MALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0 .	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D100 2100P	320 ppm	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	Ö	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	Ŏ	0	0	0	0	0	0	0
	2000 քիրո	v	V	•	v	•	v	v	·	·	-	-	•		
JBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	.0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	istration W	eek-day											
	<u>-</u>	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
															_
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
LIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	320 ppm	0	0	0	0	0	0	0	0	. 0	0	1	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admini	stration W	leek-dav											
, in the second		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
									_	•	•	•	^	•	0
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0 0	0	0 0	•
	2000 ppm	0	0	0	0	0	0	0	0	0	0	U	U	U	0
NORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRA. SOUND	Control	0	0	0	0 -	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
MALL STOOL	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
LIGO-STOOL	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	0	0	0	0	2	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	2	2
JBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO.: 0347

SEX : MALE

linical sign	Group Name	Admini	stration W	eek-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
											_				_
ESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	U	U	U
NORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
BNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
•	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	2	1
MALL STOOL	Control	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	2	1	1	1	1	0	1	. 0	0	0	0	0	0	0
	2000 ppm	1	1	0	0	0	0	0	0	0	1	0	0	0	1
IGO-STOOL	Control	0	0	0	0	0	0	0	1	1	0	0	1	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	2	1	1	1	1	0	0	0	1	0	0	0	1	1
	2000 ppm	2	1	0	0	0	0	2	0	0	1	0	0	0	1
BNORMAL TEMP	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj ALL ANIMALS

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : MALE

Clinical sign	Group Name	Admin	istration \	Week-day							
	ozo-p mano	99-7	100-7	101-7	102-7	103-7	104-7			CONTRACTOR OF THE CONTRACTOR O	
								 	<u> </u>		
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
•	800 ppm	0	0	0	0	1	1				
	2000 ppm	0	0	0	0	0	0				
DIODICI DEODYDAWYOU	a . 1	•		•	•						
ABNORMAL RESPIRATION	Control	0	0	0	0	1	1				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	1				
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	1	1				
	2000 ppm	0	0	0	0	0	0				
YELLOW URINE	Control	٥	0	0	0	٥	1				
IEFFOM GRINE	Control	0	. 0	0 1	1	0	1				
	320 ppm 800 ppm	1	0			1	1				
		0	0	0	0	0	1				
	2000 ppm	1	0	0	0	1	1				
SMALL STOOL	Control	0	. 0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
OLIGO-STOOL	Control	1	0	0	0	1	0				
05100 51005	320 ppm	0	0	0	0	0	0				
	320 ppm 800 ppm	1	1	0	0	2	1				
		2	3	3	2	0	0				
	2000 ppm	4	3	3	4	U	U				
SUBNORMAL TEMP	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				

APPENDIX A 2

CLINICAL OBSERVATION: SUMMARY, RAT: FEMALE

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

														PAGE :	49
Group Name	Adminis	tration We													
	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	

Clinical sign	Group Name	Admini	stration W	eek-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
NC ATHI	C1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm 2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 քիա	U	U	V	U	v	V	v	V	V	U	v	V	•	Ū
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0 -	0	0	0	0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CIDACK TOSTITON	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj ALL ANIMALS

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
ЕАТН	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAIII	320 ppm	0	0	0	0	0	0	0	0	0	ő	0	0	0	0
	800 ppm	0	0	0	0	0	0	Ö	0	0	0	0	0	0	ő
	2000 ppm	0	0	0	0	0	0	0	0	Ŏ	0	0	0	0	0
	,2000 ppm	v	v	V	V	v	v	v	v	•	v	•	v	•	v
DRIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	.0	0	0	0	. 0	0	0	0	0	0	0	0	0
OCOMOTON MOARWINE DEOK	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm 800 ppm	0	0	0	0	0	0	0	0	.0	0	0	0	Ö	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	2000 քիա	v	U	U	V	V	V	V	V	v	v	v	v	•	v
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0 .	0
	800 ppm	0	ő	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	Ö	Ö	ō	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	ō	o	ŏ	ō	Ō	0	0	0	0	0	0	0	0	0
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I LOURIECT FON	320 ppm	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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	U	U	U	U	U	v	U	V	v	U	U	V	v	V

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
-T-1071	0 . 1	,	^	0	0	•	٥	0	^	0	0	0	0	0	0
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	-		
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	Ŏ	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	Ô	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ANIMAL : RAT F344/DuCrj ALL ANIMALS

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
FATH	Control	0	0	0	0	0	0	1	1	1	1	1	1	1	1
EATII	Control	0	0	0 0	0 0	0	0 0	0	1	0	1 0	0	0	0	0
	320 ppm	0									1				
	800 ppm	0	0	0	0	1	1 0	1 0	1 0	1 0	0	1 0	1 0	1 0	1 0
	2000 ppm	0	0	U	0	0	υ	U	U	U	U	U	U	U	U
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT RESP	C 1	0	0	0	0	0	٥	٥	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0 0		0	0	0	0
	320 ppm	0	0	0	0	0	0	0	-		. 0	0			•
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
maibilio onii	320 ppm	0	0	0	0	0	0	0	0	0	Õ	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	ő	0	ő	Ö	0
	2000 ppm	0	0 -	0	0	0	0	0	0	0	0	0	0	0	0
	досо ррш	Ū	•	v	v	Ū	v	v	ŭ	·	v	Ů	v	v	v
ASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
OILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	. 0	0	0	ŏ	Ö	0	0	Õ	0	0	0
	320 ppm 800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm 2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	V	U	U	U	U	U	U	U	U	v	v	v	v	v
ILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
DEATII	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE															PAGE :
Clinical sign	Group Name	Admini	stration V	/eek-day			•								
, and the second	•	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	2	2	2	2	2	2	3	3	3	3	4	5
	320 բթա	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2

	a . 1			^	0	0	0	0	0	0	0	0	3	4	5
DEATH	Control	1	1	2	2	2	2	2	2	3	3	3	3	4	ე 1
	320 ppm	1	1	1	1	1	l .	1	1	1	1	1	1	1	1
	800 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	2	2
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	.0	0	0	0	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	Ö	Ö	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	o O	0	0	0	0	0	0	0	Ō	0	0	0
	2000 pp.m	v	v	Ť	·	v	· ·	·	,	·	•		•		-
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
ThubIII WIII	320 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
	800 ppm	0	Ō	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	2000 ppin	v	U	V	Ü	v	v	v	v	•	. 0	v	v	v	v
WASTING	Control	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Booo ppm	*	ŭ	•	•	·				-		-			
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	2	1	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

linical sign	Group Name	Admini	stration W	eek-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
EATII	Control	5	5	6	7	7	7	7	7	7	7	9	9	9	9
EATH	320 ppm	1	1	1	1	1	2	2	2	2	3	3	4	4	4
							2	2	3	3	3	3	4	4	5
	800 ppm	2	2 2	2 2	2 3	2 3	3	3	3	3	3	3	3	3	3
	2000 ppm	2	4	4	. 3	3	ð	3	3	J	v	3	3	3	3
RIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ррт	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOCIOTOR MOVEMENT DEOR	320 ppm	0	0	0	0	0	0	0	0	0	0	0	Ö	Ö	0
	320 րբա 800 ppm	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
	2000 ppm	U	U	. 0	U	U	U	v	v	U	U	v	v	v	J
NCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	· 800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. 1.110	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ŏ	ő
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	ő
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	v	v	U	U	U	v	v	V	v	v	v	v	V	U
DILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	2000 ppm	Ő	0	0	Ô	0	0	Ô	0	0	Ō	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admin	istration \	Week-day _							
•	-	99-7	100-7	101-7	102-7	103-7	104-7				
EATII	Control	10	11	12	12	12	12				
	320 ррш	4	5	6	8	8	8			•	
	800 ppm	6	6	6	6	6	6				
	2000 ppm	3	3	3	3	3	5				
ORIBUND SACRIFICE	Control	1	1	1	1	1	1				
	320 ppm	1	2	2	2	2	2				
	800 ppm	1	1	1	2	2	2				
	2000 ppm	1	1	1	1	2	3				
OCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	1				
UNCHBACK POSITION	Control	0	0	0	0	0	0		÷		
	320 ppm	0	1	1	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	1	0				
ARALYTIC GAIT	Control	0	0	0	0	0	0				
	320 ppm	1	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
/ASTING	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	0				
SOILED	Control	0	0	0	0	0	0				
	320 ppm	0	0	0	0	0	0				
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	1				
PILOERECTION	Control	0	0	0	0	0	0				
	320 ppm	2	1	1	0	0	0	4			
	800 ppm	0	0	0	0	0	0				
	2000 ppm	0	0	0	0	0	1				

ANIMAL : RAT F344/DuCrj

Control

320 ppm

800 ppm

2000 ppm

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
1 000 OF WAR		•	•	^	^	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	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррт	0	0	U	0	0	U	U	0	U	U	U	U	U	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPIITIIALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	.0	0	0
	2000 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
· · · · · · · · · · · · ·	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	ō
	2000 ppm	0	Õ	0	0	0	0	0	0	0	0	0	0	0	0
		· ·	•	ŭ	ž				-	-	-	-	-		Ť
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

EXTERNAL MASS

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W			·									
		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
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5000 VI 1III	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YE OPACITY	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	320 ppm	1	1	1	1	1	1	1	. 1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admin	istration W	eek-dav											
orrutoet oign	oroup traine	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
OSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	2	1	1	0	0	0
EXOPIITHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 ppm	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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	0	0	0 -	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admin	istration W	eek-day _											
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	517	52-7	53-7	54-7	55-7	56-7
								_			_			•	
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPIITHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	.1	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	2	2	3	3	3	3	3	3	3	3	4	4	4	4
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	1	1	2	2	2	2	2	3	3	3	4	4	4	4
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	2000 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	1	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admin	istration W	eek-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
							•		•		•	•	•	•	•
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPIITHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	4	5	5	5	5	5	5	5	5	5	5	6	6	6
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	4	5	5	5	5	5	5	5	5	5	5	6	6	6
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1 -	1	2	2	2	2	2	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0 -	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj ALL /

REPORT TYPE: A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
									_	_					_
LOSS OF HAIR	Control	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
EXOPIITIIALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррш	2	2	2	2	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	1
	320 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	2	3	2
	320 ppm	0	0	0	1	1	1	1	1	1	1	2	2	2	2
	800 ppm	0	0	1	1	2	2	2	2	2	3	3	3	3	3
	2000 ppm	0	1	1	1	1	1	1	1	2	3	3	3	3	3

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	istration W	eek-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
LOSS OF HAIR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
OILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPIITHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ррт	6	6	6	6	6	6	6	6	6	6	6	7	7	7
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 ppm	6	6	6	6	6	6	6	6	6	6	6	7	7	7
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	. 0	0	0	0	0	0	0	0	0	0	C
EXTERNAL MASS	Control	2	2	2	2	2	2	2	2	2	3	2	2	2	3
	320 ррт	2	2	2	2	2	2	2	2	2	2	2	1	1	1
	800 ppm	3	3	3	4	4	5	5	6	6	6	6	6	6	6
	2000 ppm	3	3	3	3	3	3	4	4	4	5	5	5	6	7

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

Clinical sign	Group Name	Admin	istration '	Week-day _					 	
		99-7	100-7	101-7	102-7	103-7	104-7			
								 • • •	 	
000 on W.Th	1	•	•	•	•		•			
OSS OF HAIR	Control	0	0	0	0	0	0			
	320 ррш	1	1	1	1	1	1			
	800 ppm	0	0	0	0	0	0			
	2000 ppm	1	- 1	1	1	1	1			
OILED PERI GENITALIA	Control	0	0	0	0	0	0			
	320 ррт	1	1	0	0	0	0			
	800 ppm	0	0	0	0	0	0			
	2000 ppm	0	0	0	0	0	1			
EXOPIITHALMOS	Control	0	0	0	0	0	0			
	320 ppm	1	0	0	0	0	0			
	800 ppm	0	Ö	Õ	0	0	Ō			
	2000 ppm	ő	ő	Ö	ŏ	ŏ	0			
NID ADLATAY	0 . 1	•								
EYE OPACITY	Control	1_	1	1	1	1	1			
	320 ppm	7	6	6	6	6	6			
	800 ppm	0	0	0	0	0	1			
	2000 ppm	2	2	2	2	3	3			
CATARACT	Control	1	1	1	1	1	1			
	320 ppm	7	6	6	6	6	6			
	800 ppm	0	0	0	0	0	1			
	2000 ppm	2	2	2	2	3	3			
ORNEAL OPACITY	Control	0	0	0	0	0	0			
-	320 ppm	0	0	0	0	0	0			
	800 ppm	0	0	0	0	0	0			
	2000 ppm	0	0	0	0	0	0			
NTERIOS CHAMBER OPACITY	Control	0	0	0	0	0	0			
C. C	320 ppm	0	1	1	1	1	1			
	800 ppm	0	0	0	0	0	0			
	2000 ppm	0	0	0	0	0	0			
	2000 ppili	v	V	v	U	v	V			
EXTERNAL MASS	Control	3	3	3	3	3	3			
	320 թթա	1	1	2	2	2	2			
	800 ppm	6	7	8	8	8	8			
	2000 ppm	7	7	7	7	7	6			

·ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

STUDY NO. : 0347

SEX: FEMALE

Clinical sign	Group Name	Adminis	stration W	eek-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
					= ,										
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
											_				_

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M. ANTERIOR. DORSUM

2000 ppm

Control

320 ppm

800 ppm

2000 ppm

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

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
		•													
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO.: 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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-
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0 -	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
f. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	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	C
	ազգ 028	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
I. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
NTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI MOUTH	Control	0	0	0	0	0 -	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	, 0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
I. ABDOMEN	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 ррщ	0	0	0	0	0	0	0	0	0	0	0	0	0	C
I. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admin	istration W	eek-dav											
		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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0 .	0	0	0	0	0	0	0	0	0
1. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2000 ppm

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name		istration W												
		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-
										_					
NTERNAL MASS	Control	0	0	1	1	1	1	1	1	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
A. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	800 ppm	0	0	0	0	1	1	1	1	1	2	2	2	2	2
	2000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	;
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	leek-day											
Ü	-	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
NTERNAL MASS	Control	0	1	1	0	0	0	0	0	0	0	0	0	0	1
	320 ррт	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NECK	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 բբտ	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	2	2	2	2	2
. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	320 բբm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

Clinical sign	Group Name	Admin	istration	Week-day _				 _	
		99-7	100-7	101-7	102-7	103-7	104-7		
INTERNAL MASS	Control	1	1	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
M. PERI MOUTH	Control	0	0	0	0	0	0		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
M. MANDIBULAR	Control	0	0	0	0	0	0		
	320 ррш	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
M. NECK	Control	1	1	1	1	1	1		
	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
M. FORLIMB	Control	0	0	0	0	0	0		
M. I ONDIND	320 ppm	0	0	0	0	0	0		
	800 ppm	0	0	0	0	0	0		
	2000 ppm	2	2	2	2	2	1		
	Pr				t				
M. BREAST	Control	1	. 1	1	1	1	1		
	320 ppm	0	0	1	1	1	1		
	800 ppm	3	4	4	4	4	4		
	2000 ppm	2	2	2	2	2	2		
M. ABDOMEN	Control	0	0	0	0	0	0		
the same Allies	320 ppm	ő	0	0	0	0	0		
	800 ppm	1	1	2	2	2	2		
	2000 ppm	2	2	2	2	2	2		
W ANTEDIOD DODOUM	Control	1	1	1	1	1	1		
M. ANTERIOR. DORSUM	320 ppm	0	0	0	0	0	0		
	320 ppm 800 ppm	0	0	0	0	0	0		
	2000 ppm	0	0	0	0	0	0		
	2000 ppm	U	v	0	J	J	v		

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE: A1 104

SEX : FEMALE

Clinical sign	Group Name	Adminis	stration We	ek-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
annym () T (0 . 1	•	0	0	0	0	0	0	0	0	0	0	0	0	0
i. GENITALIA	Control	0 0	0	0	0	0	0	0	0	0	0	0	ŏ	Õ	0
	320 ppm		0	0	0	0	0	0	0	0	0	0	Ö	0	0
	800 ppm 2000 ppm	0	0	0	0	0	0	0	0	0	Ő	0	0	0	0
	2000 իքա	U	V	U	V	v	V	v	v	ŭ	· ·	·	•	•	
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
_	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRIJAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0 ,	0
	800 ppm	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
THE PARTY AND A STATE OF THE PARTY AND A STATE	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
									٨	0	ō	0	0	0	0
I. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0 0	0	0 0	0 0	0
	320 ppm	0	0	0	0	0	0	0			0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	U	v	U	U	U	U	U	U
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRIJAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 do Nation	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIOGRAD ROOT THITTOIN	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	Ō	0	0	0	0	0	0	0
	2000 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
DIMITITIO	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	Ö	0	0	Õ	0	0	0	0	0	0	0	0
	2000 ppm	0	Ö	Ö	0	ō	Ō	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
(Ph OUTIND	320 ppm	0	0	0	0	0	0	Ö	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	ő	Ö	0	0	0	0	0	0
	2000 ppm	0	0	0	Õ	0	Ō	0	0	0	0	0	0	0	0

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-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
			_	_			•		2	•	0	^	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	.0	0	0	0	0	0
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	-	
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	2000 ppm	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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	. 0	0 .	0	0	0	0	0	0	0	0	(
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admini	stration W	eek-day _											
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	547	55-7	56-7
CANDIANA TA	0 1	^	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	0
	320 ppm	0	=	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
	2000 ppm	0	U	U	U	v	V	U	v	V	· ·	v	V	v	J
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0 ·	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IIII VIII III VIII III VIII VIII VIII	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL MADE IMITATION	320 ppm	0	Ő	0	. 0	Ŏ	Ö	0	Ō	Ō	0	0	0	0	0
	800 ppm	ŏ	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	ō	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
DESCRIPTION OF THE PROPERTY OF	320 ppm	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	Ő	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	Ö	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	C
NED CHIND	320 ppm	0	0	Ö	0 -	0	0	ō	0	0	0	0	0	0	C
	800 ppm	0	0	Ō	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

Clinical sign	Group Name	Admini	istration W	eek-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
A ADMITMAL TA	C - to 1	0	٥	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
	320 ppm 800 ppm	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
	2000 ppm	U	V	U	U	v	V	V	v	V	Ü	v	V	•	v
ANEMIA	Control	0	0	0	1	1	1	1	1	1	1	1	1	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01101101101	320 ppm	0	Ö	Ŏ	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	Õ	0 .	0	0	0	0	0	0	0	0	0	0
	2000 ppm	ō	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
TEMORITAGE	320 ppm	0	0	0	0	0	0	ő	0	0	ů	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	ŏ	Ŏ	0
	2000 ppm	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0
	2000 ppin	V	V	V	V	Ū	v	v	v	·	v	·	·	•	•
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
IBRORUME RESI IMITAL	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
DET DITEITING	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	Ö	ŏ
	800 ppm	0	0	0	0	0	0	0	0	0	0	Ö	0	Ō	Ö
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	Ö	0	o
												_			
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	υ	U	U

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

Clinical sign	Group Name	Admini	stration We	ek-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	84-1
												_			
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	1	1	1	1	1	1	1	2	2	2	2
	800 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDISE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
٥	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2000 ррш	0	0	0	0	0	0	0	0	0	0	2	1	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	2	1	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	O
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2000 ppm	0	0	0	0	0	3	3	5	4	6	6	7	9	g

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

Clinical sign	Group Name		stration W												
		85-7	867	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. GENITALIA	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	320 ppm	2	2	2	2	2	2	2	2	2	2	2	1	1	1
	800 ppm	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	2000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
NEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	1	1	1	1	1	1	2	2	2	1	1	0	1	1
	800 ppm	0	0	0	0	0	0	1	1	1	2	2	2	1	2
	2000 ppm	0	1	1	0	0	0	0	1	. 1	1	1	1	1	0
JAUNDISE	Control	0	0	0	- 0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	320 ppm	0	0	0	0	0	0	1	1	1	0	0	0	0	0
	800 ppm	0	1	0	0	0	0	1	1	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	.0	0	0	0	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	C
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	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	(
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	(
	800 ppm	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	2000 ppm	10	11	11	10	11	18	18	18	17	17	18	18	21	21

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

Clinical sign	Group Name	Admin	istration '	Week-day _			
		99-7	100-7	101-7	102-7	103-7	104-7
M. GENITALIA	Control	0	0	0	0	0	0
	320 ppm	1	1	1	1	1	1
	800 ppm	2	2	2	2	2	2
	2000 ppm	1	1	1	1	1	1
		-	-				
ANEMIA	Control	0	0	0	0	0	0
	320 ppm	1	1	0	0	0	0
	800 ppm	1	1	2	4	4	5
	2000 ppm	0	0	0	2	2	2
JAUNDISE	Control	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0
	800 ppm	0	0	1	0	0	0
	2000 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	320 ppm	1	0	0	0	0	0
	800 ppm	0	0	0	1	0	0
	2000 ppm	0	0	0	0	0	0
			•		^	•	•
IRREGULAR BREATHING	Control	0	0	0	0	0	0
	320 ppm	0	2	1	0	0	0
	800 ppm	0	0	1	1	1	1
	2000 ppm	0	0	0	0	0	1
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0
IDMOVARD KD1 TWI TOH	320 ppm	0	2	1	0	0	0
	800 ppm	0	0	1	1	1	1
	2000 ppm	0	0	0	0	1	1
	2000 իիա	v	V	v	V		
DEEP BREATHING	Control	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0
	800 ppm	0	0	ő	0	0	0
	2000 ppm	0	0	0	0	1	ŏ
	2000 քիլո	v	v	v	•	*	Ť
RED URINE	Control	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0
	800 ppm	2	2	2	2	2	2
	2000 ppm	21	22	24	23	24	25
	FF						

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE: 81

Clinical sign	Group Name	Admini	stration We	eek-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
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190) BAIS 3

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

STUDY NO. : 0347

SEX : FEMALE

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Clinical sign	Group Name	Admini	stration W	eek-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
			_					•	•	•	•	0	^		0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	Û	U
	320 ppm	0	0	0	0	0	0	0	0	0	U	Ü	0	Ü	U
	mqq 008	0	0	0	0	0	0	0	0	0	0	0	0	0	U
	2000 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
	320 рры	0	0	O.	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 բբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190) BAIS 3

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

REPORT THE PART TO

SEX : FEMALE

PAGE: 83

Clinical sign	Group Name	Admini	stration W	eek-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
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLIGO-STOOL	Control	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	. 0	0	1	0	0	0	0
	2000 թթտ	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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	.0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE: 84

Clinical sign	Group Name	Admini	stration W	eek-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
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 85

Clinical sign	Group Name	Admini	istration W	eek-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
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 բջա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0,	0	0	0	0	0	0	0	0	0	. 0	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	320 թբա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190) BAIS 3

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

SEX : FEMALE

PAGE: 86

Clinical sign	Group Name	Admin	stration W	eek-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
ELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 թթա	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALL STOOL	Control	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
LIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0
SUBNORMAL TEMP	Control	0	0	0	0	. 0	0	0	0	0	0	0	0	0	. 0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

SEX : FEMALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE: 87

Clinical sign	Group Name	Admini	stration W	eek-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
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	320 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	320 ррт	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0 .	0	0
	320 ppm	1	1	1	1	1	1	0	0	0	0	0	1	1	2
	800 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	2000 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
	320 ррш	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE: 88

Clinical sign	Group Name	Admin	istration '	Week-day _			
		99-7	100-7	101-7	102-7	103-7	104-7
YELLOW URINE	Control	0	0	0	0	0	0
	320 ррт	1	1	0	0	0	0
	800 ppm	1	1	3	2	2	3
	2000 ppm	0	0	1	1	1	1
SMALL STOOL	Control	0	0	0	1	1	2
	320 ррт	1	0	0	0	0	0
	800 ppm	0	1	. 1	1	1	2
	2000 ppm	0	0	0	1	1	0
OLIGO-STOOL	Control	0	0	0	0	0	1
	320 ppm	2	2	1	0	0	0
	800 ppm	0	1	1	0	0	1
	2000 ppm	0	ō	0	2	2	1
SUBNORMAL TEMP	Control	0	0	0	0	0	0
CODITOTALE TORIL	320 ppm	0	0	0	0	0	0
	800 ppm	0	0	0	0		
	2000 ppm	0	0		0	0	0
	2000 ppm	U	U	0	U	U	1

(HAN190)

APPENDIX B 1

BODY WEIGHT CHANGES :SUMMARY, RAT : MALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

BODY WEIGHT CHANGES (SUMMARY) ALL ANIMALS

roup Name	Adminis	tration	week											
	0		1		2		3		4		5		6	
Control	123±	5	156±	7	185±	8	207±	8	224±	9	239±	9	251±	10
320 ppm	123±	5	153±	9	182±	9	204±	10	222±	11	236±	12	248±	13
800 ррш	123±	5	151±	6 * *	179±	8**	201±	10**	218±	11**	232±	12**	242±	12**
2000 ppm	123±	5	141±	7**	167±	8**	189±	8**	205±	9**	220±	9**	230±	10**
Significant differe	ence; *: P ≤ 0.	05	** : P ≤ 0.0	1			Test of D	unnett						

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE: A1 104

SEX : MALE

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

roup Name	Admini	stration	week											
	7		8		9		10		11		12		13	
Control	262±	10	270±	10	279±	10	285±	11	291±	11	296±	11	302±	11
320 ррт	258±	14	267±	14	274±	14	280±	15	285±	15	291±	16	295±	15*
800 թթա	253±	13**	261±	13**	268±	14**	275±	14**	280±	14**	285±	14**	290±	15**
2000 ppm	239±	11**	246±	11**	253±	12**	259±	12**	264±	12**	269±	12**	273±	12**

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

Test of Dunnett

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

BODY WEIGHT CHANGES

ALL ANIMALS

(SUMMARY)

OLUMNOD (OCUME

Admini	stration v	week											
14		18		22		26		30		34		38	
307±	11	322±	12	335±	14	348±	14	355±	15	364±	17	374±	17
299±	15*	314±	16*	326±	17**	336±	18**	343±	19**	350±	21**	357±	23**
294±	15**	308±	16**	321±	16**	332±	18**	340±	18**	345±	21**	353±	22**
277±	13**	292±	15**	305±	15**	317±	16**	324±	21**	331±	20**	338±	23**
· D < 0		± · D < 0	01			Tout of D	······································						
	14 307± 299± 294± 277±	307± 11 299± 15* 294± 15** 277± 13**	14 18 307± 11 322± 299± 15* 314± 294± 15** 308± 277± 13** 292±	$307\pm$ 11 $322\pm$ 12 $299\pm$ 15* $314\pm$ 16* $294\pm$ 15** $308\pm$ 16** $277\pm$ 13** $292\pm$ 15**	14 18 22 $307\pm$ 11 $322\pm$ 12 $335\pm$ $299\pm$ $15*$ $314\pm$ $16*$ $326\pm$ $294\pm$ $15**$ $308\pm$ $16**$ $321\pm$ $277\pm$ $13**$ $292\pm$ $15**$ $305\pm$	14 18 22 307 ± 11 322 ± 12 335 ± 14 $299\pm 15*$ $314\pm 16*$ $326\pm 17**$ $294\pm 15**$ $308\pm 16**$ $321\pm 16**$	14 18 22 26 $307\pm$ 11 $322\pm$ 12 $335\pm$ 14 $348\pm$ $299\pm$ $15*$ $314\pm$ $16*$ $326\pm$ $17**$ $336\pm$ $294\pm$ $15**$ $308\pm$ $16**$ $321\pm$ $16**$ $332\pm$ $277\pm$ $13**$ $292\pm$ $15**$ $305\pm$ $15**$ $317\pm$	14 18 22 26 307± 11 322± 12 335± 14 348± 14 299± 15* 314± 16* 326± 17** 336± 18** 294± 15** 308± 16** 321± 16** 332± 18** 277± 13** 292± 15** 305± 15** 317± 16**	14 18 22 26 30 307± 11 322± 12 335± 14 348± 14 355± 299± 15* 314± 16* 326± 17** 336± 18** 343± 294± 15** 308± 16** 321± 16** 332± 18** 340± 277± 13** 292± 15** 305± 15** 317± 16** 324±	14 18 22 26 30 307± 11 322± 12 335± 14 348± 14 355± 15 299± 15* 314± 16* 326± 17** 336± 18** 343± 19** 294± 15** 308± 16** 321± 16** 332± 18** 340± 18** 277± 13** 292± 15** 305± 15** 317± 16** 324± 21**	14 18 22 26 30 34 307± 11 322± 12 335± 14 348± 14 355± 15 364± 299± 15* 314± 16* 326± 17** 336± 18** 343± 19** 350± 294± 15** 308± 16** 321± 16** 332± 18** 340± 18** 345± 277± 13** 292± 15** 305± 15** 317± 16** 324± 21** 331±	14 18 22 26 30 34 307± 11 322± 12 335± 14 348± 14 355± 15 364± 17 299± 15* 314± 16* 326± 17*** 336± 18** 343± 19** 350± 21*** 294± 15** 308± 16** 321± 16** 332± 18** 340± 18** 345± 21** 277± 13** 292± 15** 305± 15** 317± 16** 324± 21** 331± 20**	14 18 22 26 30 34 38 307± 11 322± 12 335± 14 348± 14 355± 15 364± 17 374± 299± 15* 314± 16* 326± 17** 336± 18** 343± 19** 350± 21** 357± 294± 15** 308± 16** 321± 16** 332± 18** 340± 18** 345± 21** 353± 277± 13** 292± 15** 305± 15** 317± 16** 324± 21** 331± 20** 338±

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj UNIT : g

REPORT TYPE : A1 104

BODY WEIGHT CHANGES (SUMMARY)

ALL ANIMALS

SEX : MALE

	42		week											
			46		50		54		58		62			
Control	382±	19	388±	19	392±	20	398±	20	403±	21	406±	24	409±	29
320 ppm	363±	23**	369±	25**	373±	27**	379±	29**	383±	28**	387±	30**	392±	30**
800 թրա	359±	23**	365±	25**	369±	25**	374±	26**	377±	27**	381±	28**	385±	27**
2000 ppm	343±	24**	348±	22**	351±	22**	355±	22**	357±	21**	356±	21**	357±	21**

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

ip Name	Admini	stration v	veek											
	70		74		78	<u></u>	82		86		90		94	
Control	406±	40	416±	27	419±	33	428±	22	425±	24	423±	25	419±	28
320 ppm	393±	29*	400±	27**	402±	28*	407±	26**	405±	26**	404土	27**	399±	27**
800 ppm	385±	28**	387±	28**	388±	30**	388±	31**	385±	34**	382±	27**	376±	27**
2000 ppm	355±	20**	355±	20**	356±	19**	357±	18**	348±	24**	341±	21**	332±	28**
Significant difference;	*: P ≤ ().05 *	* : P ≤ 0.0	01			Test of Du	nnett						

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

PAGE: 6

Group Name	Admin	istration	week					
•	98		102	104				
Control	419±	33	412± 40	408±	41			
320 ppm	393±	28**	388± 28	** 383±	32**			
on ppm	****	50	300	***				
800 ppm	367±	30**	357± 36	** 353±	33**			
2000 ppm	325±	30**	318± 3	** 316±	30**			
			0.94				 	
Significant differ	ence; *: P ≦	0.05	** : $P \leq 0.01$			Test of Dunnett		
								D.C.

(HAN260)

APPENDIX B 2

BODY WEIGHT CHANGES: SUMMARY, RAT: FEMALE

(2-YEAR STUDY)

BODY WEIGHT CHANGES ALL ANIMALS (SUMMARY)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

PAGE: 7

ame	Admini	stration	week											
	0		1		2		3		4		5		6	
ntrol	96±	3	115±	4	126±	5	134±	5	140±	5	147±	6	151±	6
) ppm	96±	3	113±	4	124±	5	132±	6	138±	8	146±	7	149±	8
חיינים (96±	3	112±	4**	123±	5*	132±	6	138±	7	144±	7	149±	8
) ppm	96±	3	108±	4**	119±	5**	127±	5 **	132±	6**	137±	6**	141±	7**
nificant difference	· D < 0		odr · D < N (1 1			Test of Dun	eatt						
nificant difference; *	: P ≦ 0). 05 *	•*: P ≦ 0.0)1			Test of Dunn	ett				-		

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

BODY WEIGHT CHANGES

(SUMMARY)

ALL ANIMALS

ıp Name	Admini	stration	week											
	7		8		9		10		11		12		13	
Control	154±	7	157±	8	160±	8	163±	9	166±	9	168±	9	170±	10
320 ppm	153±	8	156土	8	160±	9	163±	9	165±	9	168±	10	171±	10
800 ppm	152±	8	155±	9	158±	9	161±	9	164±	9	167±	9	169±	9
2000 ppm	143±	7**	146±	7**	149±	7**	150±	8**	154±	8**	155±	8**	158±	8**
Significant difference	a: *:P<(1.05 4	*: P ≤ 0.0				Test of Dur	nnatt						

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 104

SEX : FEMALE

(SUMMARY) BODY WEIGHT CHANGES

ALL ANIMALS

up Name	Admini	istration	week											
	14		18		22		26		30		34		38	
Control	171±	10	179±	11	185±	12	189±	12	194±	12	198±	13	200±	13
320 ppm	173±	10	180±	11	187±	12	191±	12	197±	13	200±	14	204±	15 .
800 ppm	171±	10	177±	10	184±	10	188±	10	193±	11	195±	11	197±	12
2000 ppm	159±	8**	165±	9**	171±	9**	175±	10**	179±	10**	181±	10**	183±	11**
Significant difference	e; *:P≦	0.05	$**: P \leq 0.$	01			Test of Du	nnett						

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

BODY WEIGHT CHANGES ALL ANIMALS

(SUMMARY)

PAGE: 10

oup Name	Admini	stration	week		10.1								
	42		46	50		54		58		62		66	
Control	205±	14	210±	15 213±	16	217± 17		220±	18	224±	19	230±	21
320 ppm	208±	16	212±	17 215±	18	219± 18		223±	19	228±	22	233±	24
800 ррш	201±	13	205±	14 208±	15	212± 16		215±	16	219±	17	223±	19
2000 ррш	186±	11**	188±	11** 191±	12**	193± 12	**	194±	13**	195±	13**	198±	13**
Significant differen	ce; *:P≦(0.05	** : P ≤ 0.01			Test of Dunne	tt						
17000													

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 104

SEX : FEMALE

BODY WEIGHT CHANGES

(SUMMARY)

ALL ANIMALS

up Name	Admini	stration	week											
	70		74		78	· ···	82		86		90		94	
Control	234±	22	241±	. 23	247±	24	253±	24	257±	26	262±	25	262±	25
320 ppm	234±	26	241±	27	247±	28	254±	28	255±	28	257±	28	257±	30
800 ppm	225±	19	229±	19	233±	21*	240±	22*	242±	22*	242±	24**	243±	23**
2000 ppm	199±	14**	199±	14**	202±	17**	206±	19**	210±	18**	211±	18**	211±	22**
													M	
Significant differe	ence ; * : P ≦ 6	0.05	**: P ≤ 0.0	01			Test of D	unnett						
(AN260)		•												•

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 104 BODY WEIGHT CHANGES (SUMMARY) ALL ANIMALS

roup Name	Administration	week		
	98	102	104	
Control	265± 25	268± 24	266± 23	
320 ppm	257± 34	264± 28	261± 28	
800 ppm	242± 23**	242± 25**	240± 28**	
2000 ppm	212± 25**	212± 34**	208± 23**	
Significant differe	ence; *: P ≤ 0.05	** : P ≤ 0.01	Test of Dunnett	
HAN260)				ВА

APPENDIX C 1

WATER CONSUMPTION CHANGES : SUMMARY, RAT : MALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

oup Name	Administration	week-day(effective)					
······································	1-7(4)	2-7(4)	3-7 (4)	4-7(4)	5-7 (4)	6-7 (4)	7-7 (4)
Control	18.0± 1.0	18.8± 1.1	20.3± 2.3	19.9± 2.4	18.9± 1.2	18.6± 1.6	18.5± 1.3
320 ppm	15.6± 2.3**	16.8± 1.2**	16.9± 1.1**	17.3± 1.4**	16.4± 1.2**	16.1± 1.1**	16.9± 3.5**
800 ppm	14.2± 2.0**	15.1± 4.1**	15.4± 1.6**	15.5± 1.2**	14.9± 1.0**	14.6± 1.4**	14.5± 1.3**
2000 ppm	11.7± 1.0**	12.1± 0.9**	13.3± 3.4**	13.4± 2.7**	12.8± 1.2**	12.2± 0.9**	12.2± 1.0**
Significant differe	ence; *: P ≤ 0.05	* *: P ≤ 0.01		Test of Dunnett			

BAIS 3

PAGE: 1

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

up Name	Administration	week-day(effective)_					
	8-7 (4)	9-7 (4)	10-7 (4)	11-7(4)	12-7 (4)	13-7(4)	14-7 (4)
Control	18.2± 1.5	17.9± 1.5	17.8± 1.4	17.1± 1.4	16.9± 1.4	17.7± 1.7	17.5± 1.3
320 ppm	16.4± 3.6**	15.8± 1.1**	16.0± 1.1**	15.2± 1.3**	15.0± 1.2**	16.0± 1.5**	15.3± 1.3**
800 ppm	13.9± 1.1**	13.9± 0.9**	14.6± 1.0**	13.5± 1.1**	13.6± 1.0**	14.2± 1.0**	13.9± 0.8**
2000 ppm	11.6± 0.8**	11.9± 0.9**	12.1± 0.9**	11.6± 1.0**	11.5± 0.8**	11.8± 1.7**	11.7± 1.4**
Significant differen	ice; *: P ≤ 0.05	** : P ≦ 0.01		Test of Dunnett			

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

oup Name	Administration	week-day(effective)					
	18-7 (4)	22-7 (4)	26-7(4)	30-7(4)	34-7(4)	38-7(4)	42-7(4)
Control	16.5± 1.2	16.2± 1.1	16.7± 2.4	16.5± 1.2	16.5± 1.6	16.4± 1.4	16.3± 1.3
320 ppm	14.8± 0.9**	14.9± 1.7**	14.6± 0.8**	15.0± 2.8**	14.4土 1.1**	14.4± 1.0**	14.4± 1.1**
800 ppm	13.8± 1.5**	13.1± 0.8**	13.3± 0.8**	13.5± 0.8**	13.3± 1.4**	13.6± 1.0**	13.7± 0.9**
2000 ppm	11.7± 0.8**	11.4± 0.8**	11.6± 0.9**	11.6± 1.8**	11.7± 0.9**	12.3± 1.3**	12.0± 1.7**
Significant differe	ence; *: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			
IAN260)							

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 104 WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

oup Name	Administration	week-day(effective)						
	46-7 (4)	50-7(4)	54-7 (4)	58-7(4)	62-7 (4)	66-7 (4)	70-7 (4)	
Control	16.4± 1.1	16.5± 0.9	17.5± 1.1	16.8± 1.2	17.5± 1.4	17.0± 2.9	18.6± 2.6	
320 ppm	14.7± 1.2**	15.4± 3.2**	15.8± 1.4**	15.3± 1.0**	15.9± 1.2**	15.7± 1.3**	16.6± 1.3**	
800 mud 008	13.7± 1.2**	14.1± 0.9 * *	14.9± 1.2**	14.5± 1.4**	15.4± 1.3**	15.0± 1.1**	15.7± 1.4**	
2000 ppm	12.6± 1.2**	12.6± 1.0**	13.1± 1.1**	12.8± 1.1**	13.5± 1.6**	13.3± 1.5**	13.7± 1.5**	
Significant difference	* * P < 0.05	** : P ≤ 0.01		Test of Dunnett				

WATER CONSUMPTION CHANGES (SUMMARY) STUDY NO. : 0347 ALL ANIMALS

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE: Al 104

SEX : MALE

PAGE: 5

Administration 74-7(4)	week-day(effective) 78-7(4)	82-7 (4)	86-7(4)	90-7 (4)	94-7(4)	98-7(4)
18.3± 1.4	18.3± 1.7	17.8± 1.8	18.0± 2.6	18.4± 2.3	18.9± 2.9	19.7± 3.0
16.4± 1.2**	16.4± 2.9**	16.4± 1.2**	16.2± 2.0**	16.7± 1.7**	17.0± 2.1**	17.2± 2.6**
15.5生 1.4**	15.3± 1.5**	15.3± 1.5**	15.1± 1.8**	16. 4± 4. 3**	16.5± 2.3**	17.4± 3.8**
13.7± 1.5**	13.7± 1.6 * *	13.6± 1.7**	13.7± 1.7 **	14.1± 2.3**	14.1± 2.4**	15.3± 3.7**
; *:P≤0.05 *	*: P ≤ 0.01		Test of Dunnett			
	74-7(4) 18.3± 1.4 16.4± 1.2** 15.5± 1.4** 13.7± 1.5**	18.3 ± 1.4 18.3 ± 1.7 $16.4\pm 1.2**$ $16.4\pm 2.9**$ $15.5\pm 1.4**$ $15.3\pm 1.5**$ $13.7\pm 1.5**$ $13.7\pm 1.6**$	$74-7(4)$ $78-7(4)$ $82-7(4)$ 18.3 ± 1.4 18.3 ± 1.7 17.8 ± 1.8 $16.4 \pm 1.2 **$ $16.4 \pm 2.9 **$ $16.4 \pm 1.2 **$ $15.5 \pm 1.4 **$ $15.3 \pm 1.5 **$ $15.3 \pm 1.5 **$ $13.7 \pm 1.5 **$ $13.7 \pm 1.6 **$ $13.6 \pm 1.7 **$	$74-7(4)$ $78-7(4)$ $82-7(4)$ $86-7(4)$ 18.3 ± 1.4 18.3 ± 1.7 17.8 ± 1.8 18.0 ± 2.6 $16.4 \pm 1.2 **$ $16.4 \pm 2.9 **$ $16.4 \pm 1.2 **$ $16.2 \pm 2.0 **$ $15.5 \pm 1.4 **$ $15.3 \pm 1.5 **$ $15.3 \pm 1.5 **$ $15.1 \pm 1.8 **$ $13.7 \pm 1.5 **$ $13.7 \pm 1.6 **$ $13.6 \pm 1.7 **$ $13.7 \pm 1.7 **$	$74-7(4)$ $78-7(4)$ $82-7(4)$ $86-7(4)$ $90-7(4)$ 18.3 ± 1.4 18.3 ± 1.7 17.8 ± 1.8 18.0 ± 2.6 18.4 ± 2.3 $16.4\pm 1.2**$ $16.4\pm 2.9**$ $16.4\pm 1.2**$ $16.2\pm 2.0**$ $16.7\pm 1.7**$ $15.5\pm 1.4**$ $15.3\pm 1.5**$ $15.3\pm 1.5**$ $15.1\pm 1.8**$ $16.4\pm 4.3**$ $13.7\pm 1.5**$ $13.7\pm 1.6**$ $13.6\pm 1.7**$ $13.7\pm 1.7**$ $14.1\pm 2.3**$	$74-7(4) \qquad 78-7(4) \qquad 82-7(4) \qquad 86-7(4) \qquad 90-7(4) \qquad 94-7(4)$ $18.3\pm \ 1.4 \qquad 18.3\pm \ 1.7 \qquad 17.8\pm \ 1.8 \qquad 18.0\pm \ 2.6 \qquad 18.4\pm \ 2.3 \qquad 18.9\pm \ 2.9$ $16.4\pm \ 1.2** \qquad 16.4\pm \ 2.9** \qquad 16.4\pm \ 1.2** \qquad 16.2\pm \ 2.0** \qquad 16.7\pm \ 1.7** \qquad 17.0\pm \ 2.1**$ $15.5\pm \ 1.4** \qquad 15.3\pm \ 1.5** \qquad 15.3\pm \ 1.5** \qquad 15.1\pm \ 1.8** \qquad 16.4\pm \ 4.3** \qquad 16.5\pm \ 2.3**$ $13.7\pm \ 1.5** \qquad 13.7\pm \ 1.6** \qquad 13.6\pm \ 1.7** \qquad 13.7\pm \ 1.7** \qquad 14.1\pm \ 2.3** \qquad 14.1\pm \ 2.4**$

BAIS 3 (HAN260)

WATER CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX	:	MALI
SEA	•	WINT

PAGE: 6

roup Name	Administration 102-7(4)	week-day(effective) 104-7(4)		
Control	20.4± 3.6	20.4± 4.3		
320 ppm	17.7± 2.7**	17.5± 3.2**		
800 mdd 008	17.6± 4.8**	17.7± 5.5**		
2000 ррт	15.8± 2.6**	15.8± 2.9**		
00 1.00	1 1 D C 0 05	h. D < 0.01	Test of Dunnett	
Significant differe (HAN260)	ence; *: P ≤ 0.05	* : P ≤ 0.01	legr of bankerr	BAIS

APPENDIX C 2

WATER CONSUMPTION CHANGES : SUMMARY, RAT : FEMALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

Name	Administration	week-day(effective)					
	1-7 (4)	2-7(4)	3-7 (4)	4-7(4)	5-7 (4)	6-7(4)	7-7 (4)
Control	15.5± 1.8	16.5± 3.1	16.9± 3.3	17.7± 4.8	16.3± 3.8	16.8± 4.9	15.9± 3.0
320 ppm	13.3± 1.1**	14.0± 3.1**	14.8± 3.2**	15.8± 5.1*	14.9± 5.7*	15.0± 4.8*	14.3± 4.3*
. 800 ррт	12.2± 1.6**	11.8± 2.2**	12.1± 2.0**	12.2± 2.5**	11.9± 4.9**	12.3± 3.9 * *	11.8± 4.2**
2000 ppm	10.0± 1.1**	9.6± 0.7**	9.9± 1.2**	9.8± 0.7**	10.0± 2.7**	10.3± 3.3**	8.8± 0.8**
Significant difference;	* : P ≤ 0.05	**: P ≤ 0.01	t and the	Test of Dunnett			

BAIS 3

PAGE: 7

(HAN260)

ANIMAL : RAT F344/DuCrj UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

Administration week-day(effective)	11-7(4) 15. 2± 3. 8 14. 1± 5. 2	12-7 (4) 16.5± 5.2 14.5± 5.4* 12.1± 4.6**	13-7(4) 17. 1± 5. 5 15. 1± 5. 9	14-7 (4) 17. 4± 5. 7 15. 1± 6. 8*
320 ppm 14.3± 5.4* 14.8± 5.1 14.7± 5.8* 800 ppm 11.5± 4.4** 11.4± 2.1** 11.4± 2.7**	14.1± 5.2	14.5± 5.4*	15.1± 5.9	15.1± 6.8*
800 ppm 11.5± 4.4** 11.4± 2.1** 11.4± 2.7**				
		19 1 + 4 6**	11 C.L. 0 Outute	11 4 - 0 0
2000 ppm 8.6± 0.8** 9.2± 0.8** 8.5± 0.8**	11.7± 4.3**	14.1 4.0**	11.6± 2.3**	11.4± 2.9**
	8.9± 1.4**	9.2± 1.4**	8.8± 0.9**	8.8± 0.7**
Significant difference; $*: P \leq 0.05$ $**: P \leq 0.01$	Test of Dunnett			

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE: A1 104

SEX : FEMALE

PAGE: 9

oup Name	Administration v 18-7(4)	week-day(effective) 22-7(4)	26-7 (4)	30-7 (4)	34-7(4)	38-7 (4)	42-7 (4)
Control	17.5± 6.0	16.6± 4.5	16.1± 4.6	17.1± 5.9	16.6± 5.1	16.1± 5.4	16.8± 6.8
320 ppm	15.3± 5.1	14.4± 4.7*	14.8± 6.4	15.3± 6.4	14.7± 5.5	15.2± 5.9	16.0± 7.0
800 ppm	11.8± 3.4**	12.3± 4.8**	12.0± 4.9**	12.9± 5.5**	11.2± 2.0**	11.3± 3.5**	12.4± 5.6**
2000 ppm	8.8± 1.0**	9.0± 0.9**	8.9± 1.0**	9.0± 0.8**	8.8± 0.8**	9.0± 0.9**	9.0± 0.8**
Significant difference	; *: P ≤ 0.05 *	* : P ≤ 0.01		Test of Dunnett		· · · · · · · · · · · · · · · · · · ·	

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE: 10

oup Name	Administration 46-7(4)	week-day(effective) 50-7(4)	54-7 (4)	58-7(4)	62-7 (4)	66-7 (4)	70-7(4)
Control	15.5± 3.8	15.3± 4.9	16.6± 5.0	14.4± 2.7	16.5± 4.7	15.8± 2.9	16.0± 3.4
320 ppm	15.3± 5.6	13.9± 4.1	14.8± 4.2	13.6± 3.8	14.8± 4.4	15.1± 4.4	14.0± 4.8*
800 թա	12.0± 2.9**	11.3± 2.0**	12.1± 2.8**	10.6± 1.4**	11.8± 2.2**	12.3± 2.9**	12.0± 2.4**
2000 ppm	9.3± 0.8**	9.2± 0.8**	9.6± 0.9**	9.4± 1.1**	10.2± 1.2**	10.4± 1.3**	10.8± 1.5**
Significant differe	nce; *: P ≦ 0.05 *	r*: P ≤ 0.01		Test of Dunnett			

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 11

oup Name	Administration 74-7(4)	week-day(effective) 78-7(4)	82-7(4)	86-7(4)	90-7(4)	94-7 (4)	98-7(4)
Control	15.7± 4.3	15.1± 3.4	15.7± 5.1	15.4± 3.7	15.9± 2.8	16.5± 4.1	17.4± 5.0
320 ppm	14.1± 3.5	13. 2± 2. 5*	13.0生 2.4**	13.8± 3.6*	14. 2± 3. 5*	14.7± 5.8**	15.3± 6.1**
800 ppm	11.7± 2.0**	11.8± 4.7**	11.5± 1.9**	11.5± 2.5**	12.6± 3.9**	12.0± 2.6**	12.4± 2.8**
2000 ppm	10.8± 2.2**	11.1± 2.5**	11.0± 2.0**	11.3± 2.1**	12.0± 2.3**	12.8± 2.4**	13.5± 2.8**
Significant difference	; *: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			

(HAN260)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY) ALL ANIMALS

PAGE: 12

roup Name	Administration 102-7(4)	week-day(effective) 104-7(4)	·			
Control	18.1± 4.2	17.4± 4.1				
320 ppm	16.5± 7.0**	14.5士 4.1**				
800 խխա	13.0± 2.5**	12.7± 3.0**				
2000 ppm	13.7± 4.2**	13.2± 2.5**				
Significant differe	ence; *: P ≤ 0.05 *	*: P ≤ 0.01	Test of	Dunnett		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						RATS

(HAN260)

APPENDIX D 1

FOOD CONSUMPTION CHANGES : SUMMARY, RAT : MALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

roup Name	Administration	week-day(effective)					
	1-7(7)	2-7(7)	3-7(7)	4-7 (7)	5–7 (7)	6-7(7)	7–7 (7)
Control	14.3± 0.8	15.4± 0.8	15.9± 0.9	15.8± 0.8	15.6± 0.7	15.1± 0.9	15.5± 0.8
320 ppm	13.6± 1.1*	15.1± 0.9	15.5± 0.9*	15.5± 1.0	15.2± 0.9*	14.7± 0.9*	15.0± 0.9*
800 ppm	13.7± 0.7*	14.6± 0.9**	15.2± 0.8**	15.2± 0.7 * *	14.9± 0.8**	14. 4± 0. 8**	14.7± 0.8**
2000 ppm	11.9± 0.7**	13.4± 0.8**	14.2± 0.8**	14.3± 0.7**	14.3± 0.8**	13.8士 0.8**	14.0± 1.0**
Significant differe	ence; *: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj UNIT : g

REPORT TYPE : A1 104

SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

8-7 (7)	9-7(7)					
		10-7 (7)	11-7 (7)	12-7 (7)	13-7 (7)	14-7 (7)
14.9± 0.8	14.9± 0.9	14.7± 1.0	14.5± 0.9	14.2± 0.8	14.4± 0.9	14.0± 0.8
14.4± 0.9**	14.4± 1.1*	14.2± 0.9*	14.1± 0.9*	13.8± 0.9*	13.8± 0.8**	13.4± 0.8**
14.1± 0.8**	14.1± 0.9**	13.9± 0.8**	13.7± 0.7**	13.5± 0.8**	13.8± 0.8**	13.5± 0.7**
13.5± 1.0**	13.6± 0.9**	13.1± 0.9**	13.3± 0.9**	13.3± 0.9**	13.3± 0.8**	12.9± 0.8**
			Test of Duppett			
	14.4± 0.9** 14.1± 0.8** 13.5± 1.0**	14. 4± 0. 9** 14. 4± 1. 1* 14. 1± 0. 8** 14. 1± 0. 9** 13. 5± 1. 0** 13. 6± 0. 9**	14. 4± 0. 9** 14. 4± 1. 1* 14. 2± 0. 9* 14. 1± 0. 8** 14. 1± 0. 9** 13. 9± 0. 8** 13. 5± 1. 0** 13. 6± 0. 9** 13. 1± 0. 9**	14. 4± 0. 9** 14. 4± 1. 1* 14. 2± 0. 9* 14. 1± 0. 9* 14. 1± 0. 8** 14. 1± 0. 9** 13. 9± 0. 8** 13. 7± 0. 7** 13. 5± 1. 0** 13. 6± 0. 9** 13. 1± 0. 9** 13. 3± 0. 9**	14. 4± 0. 9** 14. 4± 1. 1* 14. 2± 0. 9* 14. 1± 0. 9* 13. 8± 0. 9* 14. 1± 0. 8** 14. 1± 0. 9** 13. 9± 0. 8** 13. 7± 0. 7** 13. 5± 0. 8** 13. 5± 1. 0** 13. 6± 0. 9** 13. 1± 0. 9** 13. 3± 0. 9** 13. 3± 0. 9**	14. 4± 0. 9** 14. 4± 1. 1* 14. 2± 0. 9* 14. 1± 0. 9* 13. 8± 0. 9* 13. 8± 0. 8** 14. 1± 0. 8** 14. 1± 0. 9** 13. 9± 0. 8** 13. 7± 0. 7** 13. 5± 0. 8** 13. 8± 0. 8** 13. 5± 1. 0** 13. 6± 0. 9** 13. 1± 0. 9** 13. 3± 0. 9** 13. 3± 0. 9** 13. 3± 0. 8**

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

up Name	Administration	week-day(effective)					
	18-7(7)	22-7(7)	26-7(7)	30-7 (7)	34-7(7) .	38-7(7)	42-7(7)
Control	14.6± 0.8	14.6± 0.9	15.4± 0.7	14.9± 0.9	15.4± 0.9	15.6± 0.9	15.6± 1.0
320 ppm	14.2± 0.8*	14.0± 0.8**	14.7± 0.9**	14.4± 0.8**	14.7± 1.1**	14.6± 1.2**	14.7± 1.0**
ındd 008	13.9± 0.7**	14.0± 0.8**	14.5± 0.9**	14.4± 0.8*	14.7± 1.0**	14.8± 0.9**	15.2± 0.8
2000 ррт	13.5± 1.0**	13.6± 0.9**	14.2± 0.9**	14.1± 1.6**	14.7± 1.1**	14.9± 1.2**	14.9± 1.5*
Significant differenc	pe; *: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

(HAN260)

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

oup Name	Administration	week-day(effective)_					
	46-7 (7)	50-7 (7)	54-7 (7)	58-7(7)	62-7 (7)	66-7 (7)	70-7 (7)
Control	15.4± 0.9	15.5± 0.8	15.9± 0.9	15.8± 1.0	15.8± 1.0	15.5± 2.0	16.2± 1.0
320 ppm	14.8± 1.0**	14.9± 1.1*	15.1± 1.1**	15.1± 1.0₩	15.2± 1.1**	15.2± 1.1	15.5± 1.0**
800 ppm	15.0± 1.2	15.1± 1.0	15.3± 1.1*	15.5± 1.4	15.4± 1.0	15.4± 0.9	15.8± 1.1
2000 ppm	15.1± 1.0	15.2± 1.1	15.2± 1.0**	15.0± 1.0 * *	14.8± 1.2**	14.9± 1.0**	15.3± 1.0**
Significant differe	ence; *: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

Mullitatiation	week-day(effective)					
74-7(7)	78-7(7)	82-7(7)	86-7(7)	90-7 (7)	94-7(7)	98-7 (7)
16.2± 1.0	15.9± 1.4	15.9± 1.2	15.8± 1.2	15.7± 1.6	15.9± 1.3	16.2± 1.5
15.7± 1.0	15.2± 1.1**	15.4± 1.0	15.4± 1.1	15.4± 1.1	15.7± 1.3	15.4± 1.4
15.6± 1.2*	15.5± 1.2	15.5± 1.3	15.6± 1.3	15.2± 1.0	15.7± 0.9	15.1± 1.4*
15.2± 1.0**	15.0± 1.0**	15.1± 0.9**	15.0± 1.1**	14.8± 1.1**	15.0± 1.4**	14.5± 2.2**
	74-7(7) 16. 2± 1. 0 15. 7± 1. 0 15. 6± 1. 2* 15. 2± 1. 0**	$74-7(7)$ $78-7(7)$ 16.2 ± 1.0 15.9 ± 1.4 15.7 ± 1.0 $15.2\pm 1.1**$ $15.6\pm 1.2*$ 15.5 ± 1.2 $15.2\pm 1.0**$ $15.0\pm 1.0**$	$74-7(7)$ $78-7(7)$ $82-7(7)$ 16.2 ± 1.0 15.9 ± 1.4 15.9 ± 1.2 15.7 ± 1.0 $15.2\pm 1.1**$ 15.4 ± 1.0 $15.6\pm 1.2*$ 15.5 ± 1.2 15.5 ± 1.3 $15.2\pm 1.0**$ $15.0\pm 1.0**$ $15.1\pm 0.9**$	$74-7(7)$ $78-7(7)$ $82-7(7)$ $86-7(7)$ 16.2 ± 1.0 15.9 ± 1.4 15.9 ± 1.2 15.8 ± 1.2 15.7 ± 1.0 $15.2\pm 1.1**$ 15.4 ± 1.0 15.4 ± 1.1 $15.6\pm 1.2*$ 15.5 ± 1.2 15.5 ± 1.3 15.6 ± 1.3 $15.2\pm 1.0**$ $15.0\pm 1.0**$ $15.1\pm 0.9**$ $15.0\pm 1.1**$	$74-7(7)$ $78-7(7)$ $82-7(7)$ $86-7(7)$ $90-7(7)$ 16.2 ± 1.0 15.9 ± 1.4 15.9 ± 1.2 15.8 ± 1.2 15.7 ± 1.6 15.7 ± 1.0 $15.2\pm 1.1**$ 15.4 ± 1.0 15.4 ± 1.1 15.4 ± 1.1 $15.6\pm 1.2*$ 15.5 ± 1.2 15.5 ± 1.3 15.6 ± 1.3 15.2 ± 1.0 $15.2\pm 1.0**$ $15.0\pm 1.0**$ $15.1\pm 0.9**$ $15.0\pm 1.1**$ $14.8\pm 1.1**$	$74-7(7)$ $78-7(7)$ $82-7(7)$ $86-7(7)$ $90-7(7)$ $94-7(7)$ 16.2 ± 1.0 15.9 ± 1.4 15.9 ± 1.2 15.8 ± 1.2 15.7 ± 1.6 15.9 ± 1.3 15.7 ± 1.0 $15.2\pm 1.1**$ 15.4 ± 1.0 15.4 ± 1.1 15.4 ± 1.1 15.7 ± 1.3 $15.6\pm 1.2*$ 15.5 ± 1.2 15.5 ± 1.3 15.6 ± 1.3 15.2 ± 1.0 15.7 ± 0.9 $15.2\pm 1.0**$ $15.0\pm 1.0**$ $15.1\pm 0.9**$ $15.0\pm 1.1**$ $14.8\pm 1.1**$ $15.0\pm 1.4**$

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

Group Name	Administration 102-7(7)	week-day(effective) 104-7(7)		
Control	16.4± 1.8	15.7± 1.6		
320 ppm	15.6± 1.5	15.2± 1.4		
800 թթա	15.2± 2.2*	15.1± 1.4		
2000 ppm	14.9± 1.4**	14.7± 1.6		
Significant differ	ence; *: P ≤ 0.05	**: P ≤ 0.01	Test of Dunnett	
(HAN260)				BAIS 3

APPENDIX D 2

FOOD CONSUMPTION CHANGES: SUMMARY, RAT: FEMALE

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

UNIT : g REPORT TYPE : A1 104

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

Administration week-day(effective) Group Name 1-7(7) 2-7(7) 3-7(7) 4-7(7) 5-7(7) 6-7(7) 7-7(7) Control 10.6± 0.5 10.5 ± 0.6 10.8± 0.6 10.9 ± 0.6 10.7± 0.8 10.3 ± 0.6 10.2 \pm 0.7 320 ppm 10.4 \pm 0.5 10.6 ± 0.6 10.6± 0.7 10.7 \pm 0.9 10.7 \pm 0.8 10.3 ± 0.7 10.2 ± 0.6 800 ppm 10.1± 0.5** 10.1± 0.6** 10.5 ± 0.7 10.4± 0.7** 10.3± 0.7* 10.0± 0.7 10.0 ± 0.8 9.2± 0.5** 9.7± 0.5** 10.0± 0.6** 10.1± 0.6** 9.9± 0.6** 9.3± 0.7** 2000 ppm 9.4± 0.8**

PAGE: 7

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

(HAN260) BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

		week-day(effective)					
	8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7 (7)	13-7(7)	14-7 (7)
Control	9.9± 0.7	10.1± 0.8	9.8± 0.8	9.8± 0.7	9.8± 0.7	9.7± 0.7	9.7± 0.7
320 ppm	9.8± 0.7	10.0± 0.7	9.8± 0.7	9.8± 0.7	9.8± 0.7	10.0± 0.7	9.9± 0.7
800 ppm	9.6± 0.7	9.5± 0.7**	9.5± 0.7	9.5± 0.6	9.6± 0.6	9.6± 0.6	9.6± 0.6
2000 ppm	9.1± 0.7**	9.0± 0.7**	8.7± 0.7**	8.7± 0.7**	8.8± 0.7**	8.8± 0.7**	9.0± 1.3**

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

up Name	Administration	week-day(effective)_		•			
	18-7(7)	22-7(7)	26-7 (7)	30-7 (7)	34-7 (7)	38-7(7)	42-7 (7)
Control	10.3± 0.8	10.1± 0.8	10.2± 0.8	10.6± 0.7	10.5± 0.8	10.6± 0.8	10.7± 0.7
320 ppm	10.2± 0.7	10.3± 0.8	10.3± 0.8	10.8± 0.7	10.7± 0.7	10.9± 0.8	10.9± 0.8
800 ppm	9.9± 0.6*	10.0± 0.7	10.1± 0.6	10.4± 0.7	10.2± 0.7	10.2± 1.2	10.5± 0.9
2000 ppm	9.1± 0.7**	9.3± 0.7**	9.5± 0.9**	9.6± 0.7**	9.6± 0.7**	9.8± 0.7**	10.0± 0.6**
Significant difference;	*: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

oup Name		week-day(effective)	54.5(5)	FO 7/7)	CO. 77 (77)	66-7(7)	70-7 (7)
	46-7 (7)	50-7 (7)	54-7 (7)	58-7 (7)	62-7 (7)	66-7(7)	
Control	10.8± 0.8	10.7± 0.7	11.2± 0.8	10.9± 0.9	11.3± 0.9	11.5± 1.0	11.4± 0.9
320 ppm	11.0± 0.8	10.9± 0.9	11.4± 0.8	11.0± 0.8	11.4± 1.0	11.8± 1.1	11.4± 1.6
800 ppm	10.8± 0.8	10.4± 0.8	11.0± 0.9	10.6± 0.8	11.0± 0.9	11.0± 0.9	11.1± 0.9
2000 ppm	10.0± 0.7**	9.9± 0.8**	10.3± 0.7**	9.9± 0.9**	10.3± 0.9**	10.4± 1.0**	10.4± 0.8**
Significant difference;	*: P ≤ 0.05	**: P ≤ 0.01		Test of Dunnett			
AN260)							

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

oup Name	Administration	week-day(effective)_					
	74-7 (7)	78–7 (7)	82-7 (7)	86-7(7)	90-7(7)	94-7(7)	98-7 (7)
Control	11.7± 0.9	11.9± 1.0	11.6± 1.8	11.7± 1.4	11.8± 1.1	11.8± 1.3	12.0± 1.0
320 ppm	11.9± 1.3	11.7± 1.1	11.9± 1.1	11.8± 1.1	11.7± 1.1	11.9± 1.2	11.6± 1.7
800 ppm	11.1± 0.9*	11.1± 1.5**	11.4± 1.0	11.2± 0.9**	11.1± 0.9**	11.4± 1.1	11.0± 1.9**
2000 ррт	10.3± 1.0**	10.1± 1.3**	10.6± 1.1**	10.8± 1.1**	10.4± 1.2**	10.7± 1.4**	10.9± 1.5**
Significant differe	nce; *: P ≤ 0.05	** : P ≤ 0.01		Test of Dunnett			

(HAN260)

BAIS 3

ANIMAL : RAT F344/DuCrj

UNIT : g

REPORT TYPE : A1 104

SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)

ALL ANIMALS

Group Name	Administration 102-7(7)	week-day(effective) 104-7(7)		
Control	12.1± 1.0	11.6± 1.4		
320 ppm	12.0± 1.1	11.5± 1.5		
800 muu	11.3± 1.3*	11.0± 1.6		
2000 ррт	10.6± 2.6**	10.6± 1.9*		
Significant difference;	* : P ≤ 0.05	** : P ≤ 0.01	Test of Dunnett	
(HAN260)				BATS 3

(HAN260)

BAIS 3

APPENDIX E 1

CHEMICAL INTAKE CHANGES: SUMMARY, RAT: MALE

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 1

roup Name	Administration (weeks)								
	1	2	3	4	5	6	7		
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
320 ppm	0.032± 0.004	0.029± 0.002	0.027± 0.001	0.025± 0.002	0.022± 0.001	0.021± 0.001	0.021± 0.004		
800 թթա	0.075± 0.009	0.067± 0.018	0.062± 0.006	0.057± 0.003	0.051± 0.002	0.048± 0.004	0.046± 0.003		
2000 ppm	0.165± 0.012	0.144± 0.008	0.141± 0.036	0.130± 0.028	0.116± 0.009	0.106± 0.006	0.102± 0.008		

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 2

roup Name	Administration	(weeks)					
	8	9	10	11	12	13	14
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
320 ppm	0.020± 0.004	0.018± 0.001	0.018± 0.001	0.017± 0.002	0.017± 0.001	0.017± 0.002	0.016± 0.001
800 ppm	0.043± 0.003	0.042± 0.002	0.042± 0.003	0.039± 0.003	0.038± 0.002	0.039± 0.003	0.038± 0.002
2000 ppm	0.095± 0.005	0.094± 0.005	0.094± 0.005	0.088± 0.006	0.085± 0.005	0.087± 0.012	0.084± 0.010

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

Administration	(weeks)					
18	22	26	30	34	38	42
0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
0.015± 0.001	0.015± 0.002	0.014± 0.001	0.014± 0.003	0.013± 0.001	0.013± 0.001	0.013± 0.001
0.036± 0.004	0.033± 0.002	0.032± 0.002	0.032± 0.002	0.031± 0.003	0.031± 0.003	0.031± 0.002
0.080± 0.004	0.075± 0.004	0.073± 0.004	0.071± 0.010	0.071± 0.003	0.073± 0.005	0.070± 0.009
	0.000± 0.000 0.015± 0.001 0.036± 0.004	18 22 0.000 ± 0.000 0.000 ± 0.000 0.015 ± 0.001 0.015 ± 0.002 0.036 ± 0.004 0.033 ± 0.002	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

PAGE: 3

(HAN300) BAIS 3

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 4

Group Name	Administration (weeks)							
	46	50	54	58 .	62	66	70	
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	
320 ppm	0.013± 0.001	0.013± 0.002	0.013± 0.001	0.013± 0.001	0.013± 0.001	0.013± 0.001	0.014± 0.001	
mdd 008	0.030± 0.002	0.031± 0.001	0.032± 0.002	0.031± 0.002	0.032± 0.002	0.031± 0.002	0.033± 0.002	
2000 ppm	0.073± 0.006	0.072± 0.003	0.074± 0.005	0.072± 0.005	0.076± 0.007	0.074± 0.007	0.077± 0.007	

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day REPORT TYPE : AI 104

SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 5

roup Name	Administration (weeks)							
	74	78	82	86	90	94	98	
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	
320 ppm	0.013± 0.001	0.013± 0.002	0.013± 0.001	0.013± 0.002	0.013± 0.001	0.014± 0.002	0.014± 0.002	
800 ppm	0.032± 0.002	0.031± 0.002	0.032± 0.004	0.032± 0.004	0.035± 0.010	0.035± 0.006	0.038± 0.010	
2000 ppm	0.077± 0.008	0.077± 0.009	0.076± 0.009	0.079± 0.010	0.083± 0.012	0.085± 0.017	0.097± 0.034	

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY) ALL ANIMALS

Group Name	Administration (weeks)104		
Control	0.000± 0.000	0.000± 0.000		
320 ppm	0.015± 0.002	0.015± 0.003		
800 ppm	0.040± 0.013	0.041± 0.015		
2000 ppm	0.101 ± 0.026	0.102± 0.029		

(HAN300)

BAIS 3

APPENDIX E 2

CHEMICAL INTAKE CHANGES : SUMMARY, RAT : FEMALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

DDA - FEMILIE

					Administration (weeks)	Group Name
7	6	5	4	3	1 2	
0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000 ± 0.000 0.000 ± 0.000	Control
0.030± 0.009	0.032± 0.011	0.033± 0.013	0.036± 0.012	0.036± 0.008	0.038± 0.002 0.036± 0.008	320 ppm
0.062± 0.020	0.066± 0.022	0.066± 0.025	0.071± 0.013	0.073± 0.010	0.087± 0.012 0.077± 0.014	800 mgg 808
0.123± 0.008	0.146± 0.045	0.145± 0.039	0.149± 0.008	0.155± 0.017	0.185± 0.023 0.162± 0.010	2000 ppm
	0.146± 0.045	0.145± 0.039	0.149± 0.008	0.155± 0.017	0.185± 0.023 0.162± 0.010	2000 ppm

(HAN300)

BAIS 3

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

Group Name	Administration (w 8	9	10	11	12	13	14
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
320 ppm	0.030± 0.011	0.030± 0.010	0.029± 0.011	0.027± 0.010	0.028± 0.010	0.028± 0.011	0.028± 0.013
800 թթա	0.059± 0.021	0.058± 0.009	0.057± 0.014	0.057± 0.023	0.058± 0.024	0.055± 0.011	0.054± 0.014
2000 ррт	0.117± 0.008	0.123± 0.010	0.113± 0.007	0.116± 0.019	0.118± 0.017	0.111± 0.008	0.111± 0.007

PAGE: 8

(HAN300) BAIS 3

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 9

roup Name	Administration	(weeks)					
	18	22	26	30	34	38	42
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
320 ppm	0.027± 0.009	0.025± 0.008	0.025± 0.011	0.025± 0.010	0.024± 0.008	0.024± 0.009	0.025± 0.011
800 ppm	0.054± 0.016	0.054± 0.021	0.051± 0.021	0.054± 0.022	0.046± 0.008	0.046± 0.015	0.049± 0.021
2000 ppm	0.107± 0.009	0.105± 0.008	0.102± 0.010	0.101± 0.007	0.098± 0.006	0.098± 0.007	0.097± 0.006

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)

ALL ANIMALS

PAGE: 10

me	Administration	(weeks)	<u> </u>				
	46	50	54	58	62	66	70
trol	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
ppm	0.023± 0.008	0.021± 0.006	0.022± 0.006	0.020± 0.005	0.021± 0.006	0.021± 0.006	0.019± 0.006
ppm	0.047± 0.011	0.044± 0.007	0.046± 0.010	0.040± 0.005	0.043± 0.008	0.045± 0.012	0.043± 0.009
ppm	0.099± 0.006	0.097± 0.007	0.100± 0.007	0.097± 0.015	0.105± 0.012	0.106± 0.013	0.108± 0.016
ppm	0.099± 0.006	0.097 ± 0.007	0.100 ± 0.007	0.097 = 0.015	0.105± 0.012	0.100 ± 0.013	0, 10

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

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	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
320 ppm	0.019± 0.004	0.017± 0.003	0.016± 0.002	0.017± 0.004	0.018± 0.005	0.018± 0.007	0.019± 0.007
800 ppm	0.041± 0.008	0.040± 0.014	0.038± 0.008	0.038± 0.010	0.042± 0.015	0.040± 0.009	0.041± 0.011
2000 ppm	0.109± 0.023	0.111± 0.031	0.109 ± 0.026	0.109± 0.025	0.116± 0.028	0.123± 0.028	0.129± 0.032

(HAN300)

ANIMAL : RAT F344/DuCrj UNIT : g/kg/day

REPORT TYPE : A1 104

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

SEX : FEMALE					PAGE: 12
Group Name	Administration 102	(weeks)			
Control	0.000± 0.000	0.000± 0.000			
320 ppm	0.020± 0.008	0.018± 0.005			
800 ppm	0.043± 0.009	0.043± 0.011			
2000 ppm	0.130± 0.034	0.128± 0.030			

(HAN300)

APPENDIX F 1

HEMATOLOGY: SUMMARY, RAT: MALE

ANIMAL : RAT F344/DuCrj

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

PAGE: 1

oup Name	NO. of Animals	RED BLO 1 0 ⁶ /1	OOD CELL	HEMOGLO g/dl	BIN	HEMATOC %	RIT	MCV f &		MCH pg		MCHC g∕dl		PLATELE 1 O³/µ	
Control	40	8.00±	1.60	13.5±	2.8	41.2±	7. 2	52. 2±	6. 5	17.0±	1. 6	32.6±	1. 7	891±	277
320 ppm	44	8.50±	1. 26	14.1±	1.8	42.9±	4. 7	51.0±	5. 7*	16.8±	1. 6	32.9±	1. 1	861±	228
800 ppm	37	8.36±	1. 38	13.7±	2.1	42.0±	5.3	50.9±	5. 2**	16.5±	1.1*	32.5±	1.6	932±	148
2000 ppm	34	8. 47±	1.60	13.4±	2. 4	41.8±	6. 6	49.9±	3.9**	15.9±	1. 0**	32.0±	1. 2**	856±	163

(HCL070)

SEX : MALE

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

REPORT TYPE : A1

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

(%) WBC Differential WBC Group Name NO. of $10^{3}/\mu\ell$ N-SEG EOSINO BASO MONO LYMPHO OTHER Animals N-BAND Control 40 8.19± 11.57 $1\pm$ 1 44± 10 $2\pm$ 1 $0\pm$ 0 $5\pm$ 2 $44\pm$ 11 5± 12 2 48± 4± 6 320 ppm $1\pm$ 40± $2\pm$ 0± 0 $6\pm$ 8 44 7.02 ± 2.63 1 $4\pm$ $1\pm$ 2 $47\pm$ 10 $1\pm$ 0± $6\pm$ 2 $41\pm$ 9 4 800 ppm 37 6.96 ± 2.68 $41\pm$ $1\pm$ $0\pm$ 0 $6\pm$ 2 $46\pm$ 11 $6\pm$ 15 11.15± 23.07 $0\pm$ 1 11 1 2000 ppm 34 ** : $P \leq 0.01$ Test of Dunnett Significant difference; $*: P \leq 0.05$

PAGE: 2

(HCL070) BAIS 3

APPENDIX F 2

HEMATOLOGY: SUMMARY, RAT: FEMALE

ANIMAL : RAT F344/DuCrj

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

PAGE: 3

oup Name	NO. of Animals	RED BL	OOD CELL µl	HEMOGLO g/dl	BIN	HEMATOC %	RIT	MCV f l		MCH pg		MCHC g∕dl		PLATELE 1 O³/µ	
Control	37	8. 11±	0.74	14.8±	1.3	43.6±	2. 9	53.9±	2. 4	18.3±	0.5	34.0±	0.9	618±	103
320 ppm	37	8.00±	0.85	14.6±	1. 3	43.1±	3. 3	54.2±	3. 2	18.3±	0.8	33.9±	0.7	645±	93
800 ppm	41	7. 14±	1. 92**	13.1±	3. 3**	39.2±	8.5**	57.3±	10.6	18.7±	2.5	33.0±	2. 3**	641±	169*
2000 ppm	42	7.09±	1.05**	13.1±	1.5**	39.5±	4.0**	56.4±	4.6**	18.7±	1. 2	33.2±	0.8**	718±	77**

(HCL070)

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

HEMATOLOGY (SUMMARY) ALL ANIMALS (105W)

ıp Name	NO. of	WBC		Dif	ferentia	1 WBC (%	6)										
	Animals	1 03/1	μl	N-BAND		N-SEG		EOSINO		BASO		MONO		LYMPIIO		OTHER	
Control	37	13.51±	59. 34	1±	1	35±	12	2±	1	0±	0	4±	2	51±	13	7±	1
320 ppm	37	4.04±	5. 69	1±	1	36±	11	1±	1	ο±	0	4±	2	51±	11	6±	14
800 ppm	41	5.03±	11.32	1±	1	39±	13	1±	1	0±	0	<u>4</u> ±	3	46±	12	8±	1
2000 ppm	42	4.79±	13. 31	1 ±	1	39±	12	1±	1	ο±	0	5±	2	48±	11	7±	1

(HCL070) BAIS 3

APPENDIX G 1

BIOCHEMISTRY: SUMMARY, RAT: MALE

ANIMAL : RAT F344/DuCrj

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

PAGE: 1

oup Name	NO. of Animals	TOTAL F g/dl	PROTEIN	ΛLBUMIN g∕dl		A/G RAT	10	T-BILII mg/dl		GLUCOSE mg/dl		T-CHOLE mg/dl	STEROL	TRIGLYC mg/dl	ERIDE
Control	40	6.5±	0.5	3.3±	0.4	1.1±	0. 1	0.22±	0. 44	153±	18	164±	42	73±	51
320 ppm	44	6.7±	0. 4**	3.4±	0.3	1.1±	0.2	0.66±	3. 18*	155±	19	218±	50**	108±	83*
800 ppm	37	6.6±	0.4	3.3±	0.3	1.0±	0.1	0.22±	0.15**	142±	24*	252±	72**	115±	82**
2000 ppm	34	6.5±	0.3	3.4±	0.2	1.1±	0. 1	0.33±	0.35**	146±	17	285±	43**	195±	148**

(HCL074)

SEX : MALE

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

Group Name NO. of PHOSPHOLIPID GOT GPT LDH ALP G-GTP CPK IU/l IU/l mg/dl IU/l IU/l IU/l IU/l Animals $232\pm$ 62 40 71 95± $208 \pm$ $12\pm$ Control $41\pm$ 16 58 $231\pm$ 115 8 106± 73 44 87 320 ppm 301± 70** 106± $52\pm$ 50 196± 39 $283 \pm$ $94\pm$ 14 95* 24± 11** 800 ppm 37 $341\pm$ 87** $104 \pm$ 24* $47\pm$ 15 177± 42** $335\pm$ 116** 46± 29** 94± 21 2000 ppm 34 $409\pm$ 67** $171 \pm$ 69** $66 \pm$ 19** $193 \pm$ 134** $484\pm$ 171** 111± 33** 107± 71 Significant difference; $*: P \le 0.05$ ** : $P \leq 0.01$ Test of Dunnett

PAGE: 2

(HCL074) BAIS 3

ANIMAL : RAT F344/DuCrj

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

PAGE: 3

oup Name	NO. of Animals	UREA NI mg∕dl	TROGEN	CREATIN mg/dl	INE	SODIUM m Eq / l		POTASSI m Eq /		CHLORIDE m Eq / 2		CALCIUN mg/dl	I	INORGAN mg/dl	IC PHOSPHORUS
Control	40	19.2±	6. 9	0.5±	0.1	142±	2	3.7±	0.4	107±	2	10.2±	0.4	4.3±	0.7
320 ppm	44	18.7±	3. 1	0.5±	0.1	141±	2	3.8±	0.5	105±	2**	10.2±	0.9	4.3±	1. 3
800 ppm	37	21. 4±	4. 0**	0.6±	0.1	141±	1**	3.8±	0.4	105±	2**	10.3±	0.3*	4. 4±	0.5
2000 ppm	34	23.0±	4.0**	0.5±	0. 1	140±	[**	4.0±	0.4*	105±	2*	10.4±	0.3**	4.2±	0.5

(HCL074)

APPENDIX G 2

BIOCHEMISTRY: SUMMARY, RAT: FEMALE

ANIMAL : RAT F344/DuCrj

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

PAGE: 4

oup Name	NO. of Animals	TOTAL F g/dl	PROTEIN	ΛLBUMIN g∕dl		A/G RAT	.10	T-BILII mg/dl		GLUCOSE mg/dl		T-CHOLES mg∕dl	STEROL	TRIGLYC mg/dl	ERIDE
Control	37	6.9±	0.5	3.9±	0.3	1.3±	0. 1	0.17±	0. 11	145士	13	130±	26	64±	54
320 ppm	37	6.8±	0.4	3.9±	0. 2	1.3±	0. 1	0.16±	0.16	150±	14	140±	29	62±	44
800 ppm	41	6.7±	0.5	3.9±	0.3	1.4±	0.1	0.47±	1. 42	140±	22	154±	36**	92±	98
2000 ppm	42	6.3±	0. 4**	3.8±	0. 2**	1.5±	0.2**	0.17±	0.11	144±	16	155±	23**	75±	116

(HCL074)

ANIMAL : RAT F344/DuCrj

BIOCHEMISTRY (SUMMARY) ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : FEMALE

PAGE: 5 REPORT TYPE : A1

Group Name	NO. of Animals	PHOSPHOI mg/dl	LIPID	GOT IU/£	!	GPT I U∕ℓ		LDH IU/	2	ALP IU/A	!	G-GTP IU/l		CPK IU/	٤
Control	37	231±	48	159±	111	63±	35	330±	225	125±	75	5±	4	150±	290
320 ppm	. 37	235±	46	110±	39	45±	18*	263±	78	115±	34	5±	2	96±	21
800 ppm	41	263±	63*	172±	199	52±	41*	379±	378	144±	101	8生	6*	158±	320
2000 ppm	42	261±	43*	120±	79*	42±	17**	261±	104	154±	58**	12±	8**	110±	47

(HCL074)

BIOCHEMISTRY (SUMMARY)

ANIMAL : RAT F344/DuCrj

ALL ANIMALS (105W)

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

PAGE: 6

oup Name	NO. of Animals	UREA NI mg/dl	TROGEN	CREATIN mg/dl	INE	SODIUM m Eq / L		POTASSI mEq/		CHLORIDE m Eq / l		CALCIUN mg/dl		INORGAN mg/dl	IC PHOSPHORUS
Control	37	17.3±	1.7	0.5±	0.1	140±	1	3.8±	0.5	105±	2	10.2±	0.3	4.0±	0.8
320 ppm	37	17.4±	5.8	0.5±	0.1	140±	2	3.7±	0.4	105土	2	10.1±	0.4	3.9±	0.8
800 ppm	41	17.5±	3. 1	0.5±	0.1	140±	2	3.9±	0.4	105±	3	10.2±	0.4	4.2±	0.6
2000 ppm	42	20.3±	3, 2**	0.5±	0. 1	140±	2	4.0±	0.5*	106±	2	10.1±	0.3	4.4±	0.5*

(HCL074) BAIS 3

APPENDIX H 1

URINALYSIS: SUMMARY, RAT: MALE

URINALYSIS

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : MALE

REPORT TYPE : A1

oup Name	NO. of	_Hq								Prote	ein_			Glu	cose_				Keto	ne boo	ly			Bi	liru	bin		
	Animals	5. 0	. 6. 0	6.5	7.0	7.5	8.0	8.5	CHI	- ±	: +-	2+ 3+ 4+	CHI	-	± +	2+	3+ 4+	CIII	- =	- + 2	2+ 3+	4+	CIII		+	2+ 3+	CHI	
Control	40	0	1	3	12	20	3	1		0 +) 0	2 27 11		40	0 (0 0	0 0		39	1 0	0 (0 0		39	0	1 0)	
320 рры	44	0	0	0	5	22	16	1	**	0	0	2 21 21		43	1	0 0	0 0		41	2 0	1 (0 0		43	0	0 1		
800 ppm	38	0	2	3	7	14	12	0		0	0	0 12 26	**	38	0	0 0	0 0		36	2 0	0 (0		36	1	1 0)	
2000 ppm	35	0	2	0	6	16	11	0		0	0 0	0 18 17		35	0	0 0	0 · 0		35	0 0	0 (0 0		33	1	1 0)	

PAGE: 1

(HCL101) BAIS 3

URINALYSIS

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : MALE	REPORT	TYPE : A1			PAGE: 2
Group Name	NO. of Animals	Occult blood - ± + 2+ 3+ CHI	Urobilinogen ± + 2+ 3+ 4+ CHI		
Control	40	39 1 0 0 0	39 1 0 0 0		
320 ppm	44	42 0 0 1 1	43 0 1 0 0		
800 ppm	38	37 0 0 1 0	38 0 0 0 0		
2000 ppm	35	27 2 0 3 3 *	35 0 0 0 0		
Significan	t difference	; *: P ≤ 0.05 **	: P ≤ 0.01	Test of CHI SQUARE	
(HCL101)					BAIS 3

APPENDIX H 2

URINALYSIS : SUMMARY, RAT : FEMALE

URINALYSIS

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

PAGE: 3

ıp Name	NO. of	pH_								Prot	ein					G1u	cose			_	K	etone	body	7			Bi	lirul	oin	
	Animals	5. 0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	- :	± -	- 2-1	3+ 4	+ (CHI		± -	 2+	3+ 4	Ŀ⊩ CIII	_	- ±	+ 2-	3+ 4	4+	CHI		- - :	2+ 3+	CHI
Control	37	0	0	3	11	12	9	2		0	2 1	0 16	6	3		37	0	0 0	0	0	2	4 12	1 (0	0		37	0	0 0	
320 ррт	40	0	0	2	11	13	13	1		0	0	1 16	11 1	.2	**	40	0	0 0	0	0	1	6 22	2 (0	0		37	3	0 0	
800 ppm	42	0	0	5	12	13	10	2		0	0	0 9	21 1	.2	**	42	0	0 0	0	0	2	0 20	1 () 1	0		38	3	0 1	
2000 ppm	45	0	1	12	8	10	13	1		0	0	1 6	27 1	.1	**	45	0	0 0	0	0	3	2 12	0 () 1	0		41	2	0 2	

(HCL101)

URINALYSIS

ANIMAL : RAT F344/DuCrj

MEASURE. TIME: 1

SEX : FEMALE

REPORT TYPE : A1

oup Name	NO. of Animals	Occult blood - ± + 2+ 3+ CHI	Urobilinogen ± + 2+ 3+ 4+ CHI	
Control	37	35 1 0 1 0	37 0 0 0 0	
320 թթա	40	37 1 0 1 1	40 0 0 0 0	
800 ppm	42	30 4 0 0 8 *	41 0 1 0 0	
2000 ppm	45	9 2 0 0 34 **	43 0 2 0 0	

BAIS 3

PAGE: 4

(HCL101)

APPENDIX I 1

GROSS FINDINGS: SUMMARY, RAT: MALE ALL ANIMALS

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1 SEX : MALE

)rgan	Findings	Group Name Control NO. of Animals 50 (%)	320 ppm 50 (%)	800 ppm 49 (%)	2000 ppm 50 (%)
skin/app	${\tt nodule}$	3 (6)	5 (10)	6 (12)	5 (10)
subcutis	jaundice	0 (0)	3 (6)	0 (0)	0 (0)
	nodule	1 (2)	0 (0)	0 (0)	0 (0)
	mass	10 (20)	7 (14)	7 (14)	6 (12)
lung	red	0 (0)	1 (2)	0 (0)	1 (2)
	white zone	1 (2)	0 (0)	0 (0)	0 (0)
	red zone	0 (0)	2 (4)	0 (0)	0 (0)
	brown zone	1 (2)	0 (0)	0 (0)	0 (0)
	red patch	0 (0)	0 (0)	1 (2)	0 (0)
	edema	1 (2)	0 (0)	0 (0)	0 (0)
	nodule	3 (6)	3 (6)	5 (10)	0 (0)
	voluminus	0 (0)	0 (0)	0 (0)	1 (2)
lymph node	enlarged	1 (2)	0 (0)	2 (4)	0 (0)
spleen	enlarged	5 (10)	3 (6)	5 (10)	3 (6)
	atrophic	1 (2)	0 (0)	0 (0)	0 (0)
	white zone	1 (2)	2 (4)	0 (0)	0 (0)
	black zone	0 (0)	0 (0)	0 (0)	1 (2)
	nodule	0 (0)	0 (0)	1 (2)	2 (4)
heart	white	0 (0)	0 (0)	1 (2)	0 (0)
	white zone	0 (0)	0 (0)	1 (2)	1 (2)
	nodule	0 (0)	1 (2)	0 (0)	1 (2)
oral cavity	nodule	0 (0)	0 (0)	0 (0)	1 (2)

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1

SEX : MALE

0rgati	Findings	Group Name Control NO. of Animals 50 (%)	320 ppm 50 (%)	800 ppm 49 (%)	2000 ppm 50 (%)
tongue	nodule	0 (0)	0 (0)	0 (0)	1 (2)
forestomach	nodule	0 (0)	1 (2)	0 (0)	1 (2)
small intes	nodule	1 (2)	0 (0)	0 (0)	0 (0)
liver	enlarged	0 (0)	0 (0)	2 (4)	0 (0)
	pale	0 (0)	0 (0)	0 (0)	1 (2)
	white patch	0 (0)	0 (0)	0 (0)	2 (4)
	white zone	0 (0)	1 (2)	0 (0)	2 (4)
	red zone	0 (0)	0 (0)	0 (0)	1 (2)
	nodule	1 (2)	1 (2)	5 (10)	9 (18)
	rough	2 (4)	1 (2)	1 (2)	3 (6)
	adhesion	1 (2)	0 (0)	0 (0)	0 (0)
	hermiation	4 (8)	5 (10)	8 (16)	5 (10)
pancreas	nodule	0 (0)	0 (0)	0 (0)	1 (2)
kidney	dark	0 (0)	0 (0)	0 (0)	1 (2)
	white zone	1 (2)	0 (0)	0 (0)	0 (0)
	granular	1 (2)	2 (4)	10 (20)	7 (14)
	adhesion	1 (2)	0 (0)	0 (0)	0 (0)
urin bladd	hemorrhage	1 (2)	0 (0)	0 (0)	0 (0)
	urine:marked retention	0 (0)	0 (0)	2 (4)	0 (0)
pituitary	onlargod	2 (4)	4 (8)	2 (4)	6 (12)
•	red zone	3 (6)	5 (10)	1 (2)	1 (2)
	black zone	0 (0)	0 (0)	1 (2)	0 (0)
	Stack Bollo	· · · · · · · · · · · · · · · · · · ·	V V V/	1 (2/	• (•/

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1

SEX : MALE

rgan	Findings	Group Name Control NO. of Animals 50 (%)	320 ррт 50 (%)	800 ppm 49 (%)	2000 ppm 50 (%)
ituitary	nodule	6 (12)	2 (4)	4 (8)	2 (4)
hyroid	enlarged	1 (2)	3 (6)	3 (6)	5 (10)
	nodule	1 (2)	2 (4)	0 (0)	1 (2)
drenal	enlarged	1 (2)	3 (6)	2 (4)	0 (0)
estis	atrophic	4 (8)	9 (18)	4 (8)	5 (10)
	nodule	25 (50)	25 (50)	30 (61)	30 (60)
rep/cli gl	nodule	0 (0)	1 (2)	0 (0)	0 (0)
rain	hemorrhage	1 (2)	0 (0)	1 (2)	1 (2)
pinal cord	hemorrhage	0 (0)	0 (0)	0 (0)	1 (2)
ye	white	4 (8)	9 (18)	4 (8)	6 (12)
ymbal gl	noduIe	1 (2)	2 (4)	0 (0)	1 (2)
one	nodule	0 (0)	0 (0)	1 (2)	0 (0)
ertebra	mass	0 (0)	0 (0)	1 (2)	0 (0)
leura	nodu1e	1 (2)	0 (0)	0 (0)	1 (2)
nediastinum	nodule	0 (0)	0 (0)	1 (2)	0 (0)
	mass	0 (0)	0 (0)	1 (2)	0 (0)
peritoneum	nodule	1 (2)	0 (0)	1 (2)	0 (0)
abdominal c	hemorrhage	0 (0)	0 (0)	1 (2)	0 (0)
	ascites	2 (4)	0 (0)	0 (0)	1 (2)
thoracic ca	hemorrhage	0 (0)	0 (0)	1 (2)	0 (0)
	pleural fluid	1 (2)	0 (0)	0 (0)	1 (2)
	ascites	0 (0)	0 (0)	1 (2)	0 (0)

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1

SEX : MALE

Organ	Findings	Group Name Control NO. of Animals 50 (%)	320 ppm 50 (%)	800 ppm 49 (%)	2000 ppm 50 (%)
other	tail:nodule	3 (6)	2 (4)	1 (2)	0 (0)
	ear:nodule	0 (0)	1 (2)	0 (0)	1 (2)
	hindlimb:nodule	2 (4)	0 (0)	0 (0)	0 (0)
	lower jaw:nodule	0 (0)	0 (0)	1 (2)	0 (0)
	tail:scab	1 (2)	2 (4)	4 (8)	1 (2)
whole body	anemic	1 (2)	0 (0)	0 (0)	0 (0)

(HPT080) BAIS 3

APPENDIX I 2

GROSS FINDINGS : SUMMARY, RAT : FEMALE ALL ANIMALS

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : FEMALE

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

gan	Findings	Group Name NO. of Animals	Control 50 (%)	320 ppm 50 (%)	800 ppm 50 (%)	2000 ppm 50 (%)
in/app	nodule		1 (2)	0 (0)	2 (4)	1 (2)
bcutis	jaundice		0 (0)	2 (4)	2 (4)	1 (2)
	dry		1 (2)	0 (0)	0 (0)	0 (0)
	mass		7 (14)	5 (10)	8 (16)	8 (16)
ng	white zone		1 (2)	0 (0)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	3 (6)	0 (0)
	voluminus		0 (0)	0 (0)	0 (0)	1 (2)
mph node	enlarged		0 (0)	0 (0)	1 (2)	1 (2)
leen	enlarged		3 (6)	4 (8)	6 (12)	2 (4)
	nodule		2 (4)	0 (0)	0 (0)	0 (0)
	deformed		0 (0)	0 (0)	0 (0)	1 (2)
art	white zone		0 (0)	1 (2)	0 (0)	0 (0)
ngue	nodule		1 (2)	0 (0)	1 (2)	0 (0)
opliagus	food		0 (0)	0 (0)	2 (4)	0 (0)
restomach	ulcer		0 (0)	1 (2)	0 (0)	0 (0)
omach	nodule		1 (2)	0 (0)	0 (0)	0 (0)
all intes	red zone		0 (0)	1 (2)	0 (0)	0 (0)
rge intes	red zone		0 (0)	1 (2)	0 (0)	0 (0)
ver	white zone		0 (0)	2 (4)	0 (0)	0 (0)
	nodulo		3 (6)	2 (1)	3 (6)	6 (12)
	rough		1 (2)	2 (4)	2 (4)	2 (4)
	herniation		7 (14)	6 (12)	6 (12)	12 (24)

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1

SEX : FEMALE

galt	Findings	Group Name Control NO. of Animals 50 (%)	320 ppm 50 (%)	800 ppm 50 (%)	2000 ppm 50 (%)
ıncreas	nodule	1 (2)	0 (0)	0 (0)	0 (0)
idney	nodule	1 (2)	0 (0)	1 (2)	0 (0)
	granular	0 (0)	0 (0)	3 (6)	0 (0)
rin bladd	nodule	0 (0)	1 (2)	0 (0)	0 (0)
ituitary	enlarged	8 (16)	8 (16)	7 (14)	3 (6)
	red zone	1 (2)	7 (14)	3 (6)	3 (6)
	black zone	1 (2)	0 (0)	0 (0)	1 (2)
	nodule	8 (16)	2 (4)	7 (14)	4 (8)
	cyst	0 (0)	0 (0)	1 (2)	1 (2)
yroid	enlarged	0 (0)	2 (4)	0 (0)	0 (0)
	nodule	1 (2)	i (2)	2 (4)	0 (0)
ary	enlarged	1 (2)	0 (0)	0 (0)	0 (0)
	cyst	0 (0)	1 (2)	3 (6)	1 (2)
terus	enlarged	1 (2)	0 (0)	0 (0)	0 (0)
	nodule	7 (14)	7 (14)	7 (14)	4 (8)
	mass	0 (0)	1 (2)	0 (0)	0 (0)
	cyst	2 (4)	2 (4)	2 (4)	0 (0)
ngina	nodule	0 (0)	0 (0)	0 (0)	1 (2)
ep/cli gl	nodule	0 (0)	1 (2)	1 (2)	2 (4)
ain	hemorrhago	2 (4)	0 (0)	0 (0)	1 (2)
	nodule	0 (0)	0 (0)	1 (2)	0 (0)
e	turbid	0 (0)	1 (2)	0 (0)	0 (0)

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1

(IJPT080)

SEX : FEMALE

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	320 ррш 50 (%)	800 ppm 50 (%)	2000 ppm 50 (%)
eye	white		1 (2)	6 (12)	1 (2)	3 (6)
Harder gl	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
mediastinum	mass		0 (0)	0 (0)	0 (0)	1 (2)
peritoneum	nodule		2 (4)	0 (0)	1 (2)	0 (0)
	mass		0 (0)	0 (0)	1 (2)	0 (0)
thoracic ca	hemorrhage		0 (0)	0 (0)	1 (2)	0 (0)
	pleural fluid		1 (2)	1 (2)	1 (2)	0 (0)
other	hindlimb:nodule		0 (0)	0 (0)	1 (2)	0 (0)
whole body	аневіс		1 (2)	1 (2)	2 (4)	0 (0)

BAIS 3

APPENDIX I 3

GROSS FINDINGS: SUMMARY, RAT: MALE

DEAD AND MORIBUND ANIMALS

STUDY NO. : 0347 ANIMAL : RAT F

: RAT F344/DuCrj

GROSS FINDINGS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

Organ	Findings	Group Name Control NO. of Animals 10 (%)	320 ppm 6 (%)	800 ppm 12 (%)	2000 ppm 15 (%)
skin/app	nodule	0 (0)	1 (17)	3 (25)	1 (7)
subcutis	jaundice	0 (0)	2 (33)	0 (0)	0 (0)
	mass	6 (60)	1 (17)	3 (25)	1 (7)
lung	red	0 (0)	1 (17)	0 (0)	1 (7)
	red zone	0 (0)	1 (17)	0 (0)	0 (0)
	brown zone	1 (10)	0 (0)	0 (0)	0 (0)
	red patch	0 (0)	0 (0)	1 (8)	0 (0)
	nodule	2 (20)	0 (0)	1 (8)	0 (0)
	voluminus	0 (0)	0 (0)	0 (0)	1 (7)

1 (10)

3 (30)

1 (10)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

1 (17)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

0 (0)

2 (17)

5 (42)

0 (0)

0 (0)

0 (0)

1 (8)

0 (0)

0 (0)

0 (0)

2 (17)

0 (0)

0 (0)

1 (8)

lymph node

spleen

heart

tongue liver enlarged

enlarged

atrophic black zone

nodule

white

nodule

nodule

enlarged

pale red zone

nodule

white zone

PAGE: 1

0 (0)

0 (0)

1 (7)

1 (7)

0 (0)

1 (7)

1 (7)

0 (0)

1 (7)

1 (7)

2 (13)

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1 SEX : MALE

gan	Findings_	Group Name Control NO. of Animals 10 (%)	320 ppm 6 (%)	800 ppm 12 (%)	2000 ppm 15 (%)
ver	rough	1 (10)	0 (0)	1 (8)	0 (0)
	herniation	1 (10)	1 (17)	1 (8)	3 (20)
ncreas	nodule	0 (0)	0 (0)	0 (0)	1 (7)
dney	dark	0 (0)	0 (0)	0 (0)	1 (7)
	granular	0 (0)	0 (0)	1 (8)	2 (13)
in bladd	hemorrhage	1 (10)	0 (0)	0 (0)	0 (0)
	urine:marked retention	0 (0)	0 (0)	2 (17)	0 (0)
tuitary	enlarged	1 (10)	1 (17)	1 (8)	4 (27)
	red zone	0 (0)	1 (17)	0 (0)	0 (0)
yroid	enlarged	0 (0)	0 (0)	1 (8)	1 (7)
lrenal	enlarged	1 (10)	0 (0)	1 (8)	0 (0)
estis	atrophic	0 (0)	0 (0)	2 (17)	0 (0)
	nodule	2 (20)	2 (33)	4 (33)	5 (33)
ain	hemorrhage	1 (10)	0 (0)	1 (8)	1 (7)
inal cord	hemorrhage	0 (0)	0 (0)	0 (0)	1 (7)
e	white	0 (0)	1 (17)	0 (0)	3 (20)
mbal gl	nodule	0 (0)	0 (0)	0 (0)	1 (7)
ne	nodule	0 (0)	0 (0)	1 (8)	0 (0)
rtebra	mass	0 (0)	0 (0)	1 (8)	0 (0)
eura	nodule	1 (10)	0 (0)	0 (0)	0 (0)
diastinum	nodule	0 (0)	0 (0)	1 (8)	0 (0)
	mass	0 (0)	0 (0)	1 (8)	0 (0)

ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY)

REPORT TYPE : A1

SEX : MALE

DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name NO. of Animals 1	Control 10 (%)	320 ppm 6 (%)	800 ppm 12 (%)	2000 ppm 15 (%)
peritoneum	nodule		1 (10)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		0 (0)	0 (0)	1 (8)	0 (0)
	ascites		1 (10)	0 (0)	0 (0)	1 (7)
thoracic ca	hemorrhage		0 (0)	0 (0)	1 (8)	0 (0)
	pleural fluid		0 (0)	0 (0)	0 (0)	1 (7)
other	tail:nodule		0 (0)	0 (0)	1 (8)	0 (0)
	ear:nodule		0 (0)	0 (0)	0 (0)	1 (7)
	hindlimb:nodule	,	2 (20)	0 (0)	0 (0)	0 (0)
	lower jaw:nodule		0 (0)	0 (0)	1 (8)	0 (0)
whole body	anemic		1 (10)	0 (0)	0 (0)	0 (0)

(HPT080)

BAIS 3

APPENDIX I 4

GROSS FINDINGS : SUMMARY, RAT : FEMALE

DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1

SEX : FEMALE

)rgan	Findings	Group Name Control NO. of Animals 13 (%)	320 ppm 10 (%)	800 ppm 8 (%)	2000 ppm 8 (%)
subcutis	jaundice	0 (0)	2 (20)	1 (13)	1 (13)
	mass	3 (23)	2 (20)	1 (13)	1 (13)
lung	white zone	1 (8)	0 (0)	0 (0)	0 (0)
	nodule	0 (0)	0 (0)	1 (13)	0 (0)
	voluminus	0 (0)	0 (0)	0 (0)	1 (13)
lymph node	enlarged	0 (0)	0 (0)	1 (13)	1 (13)
spleen	enlarged	2 (15)	2 (20)	1 (13)	2 (25)
	nodule	2 (15)	0 (0)	0 (0)	0 (0)
ieart	white zone	0 (0)	1 (10)	0 (0)	0 (0)
esophagus	food	0 (0)	0 (0)	2 (25)	0 (0)
forestomach	ulcer	0 (0)	1 (10)	0 (0)	0 (0)
stomach	nodule	1 (8)	0 (0)	0 (0)	0 (0)
small intes	red zone	0 (0)	1 (10)	0 (0)	0 (0)
large intes	red zone	0 (0)	1 (10)	0 (0)	0 (0)
liver	white zone	0 (0)	1 (10)	0 (0)	0 (0)
	nodule	2 (15)	1 (10)	1 (13)	0 (0)
	rough	0 (0)	1 (10)	1 (13)	2 (25)
	herniation	2 (15)	0 (0)	1 (13)	2 (25)
pancreas	nodule	1 (8)	0 (0)	0 (0)	0 (0)
kidney	nodulo	1 (8)	0 (0)	0 (0)	0 (0)
pituitary	enlarged	4 (31)	5 (50)	1 (13)	2 (25)
	red zone	0 (0)	1 (10)	1 (13)	0 (0)

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : FEMALE

PAGE: 5

Organ	Findings	Group Name Control NO. of Animals 13 (%)	320 ppm 10 (%)	800 ppm 8 (%)	2000 ppm 8 (%)
oituitary	cyst	0 (0)	0 (0)	1 (13)	0 (0)
thyroid	enlarged	0 (0)	1 (10)	0 (0)	0 (0)
vary	enlarged	1 (8)	0 (0)	0 (0)	0 (0)
terus	enlarged	1 (8)	0 (0)	0 (0)	0 (0)
	nodule	3 (23)	0 (0)	1 (13)	0 (0)
rain	hemorrhage	1 (8)	0 (0)	0 (0)	1 (13)
	nodule	0 (0)	0 (0)	1 (13)	0 (0)
re	turbid	0 (0)	1 (10)	0 (0)	0 (0)
rder gl	enlarged	0 (0)	1 (10)	0 (0)	0 (0)
diastinum	mass	0 (0)	0 (0)	0 (0)	1 (13)
eritoneum	nodule	2 (15)	0 (0)	1 (13)	0 (0)
	mass	0 (0)	0 (0)	1 (13)	0 (0)
horacic ca	hemorrhage	0 (0)	0 (0)	1 (13)	0 (0)
	ploural fluid	1 (8)	1 (10)	1 (13)	0 (0)
ther	hindlimb:nodule	0 (0)	0 (0)	1 (13)	0 (0)
hole body	anemic	1 (8)	1 (10)	1 (13)	0 (0)

(HPT080)

APPENDIX I 5

GROSS FINDINGS: SUMMARY, RAT: MALE

SACRIFICED ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1 SEX : MALE

-gan	Findings	Group Name NO. of Animals	Control 40 (%)	320 ppm 44 (%)	800 ppm 37 (%)	2000 ppm 35 (%)
in/app	nodule		3 (8)	4 (9)	3 (8)	4 (11)
ocutis	jaundice		0 (0)	1 (2)	0 (0)	0 (0)
	nodule		1 (3)	0 (0)	0 (0)	0 (0)
,	mass		4 (10)	6 (14)	4 (11)	5 (14)
ng	white zone		1 (3)	0 (0)	0 (0)	0 (0)
	red zone		0 (0)	1 (2)	0 (0)	0 (0)
	edema		1 (3)	0 (0)	0 (0)	0 (0)
	nodule		1 (3)	3 (7)	4 (11)	0 (0)
leen	enlarged		2 (5)	2 (5)	0 (0)	1 (3)
	white zone		1 (3)	2 (5)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	1 (3)	1 (3)
art	white zone		0 (0)	0 (0)	1 (3)	0 (0)
	nodule		0 (0)	1 (2)	0 (0)	0 (0)
al cavity	nodule		0 (0)	0 (0)	0 (0)	1 (3)
restomach	nodule		0 (0)	1 (2)	0 (0)	1 (3)
all intes	nodule	•	1 (3)	0 (0)	0 (0)	0 (0)
ver	white patch		0 (0)	0 (0)	0 (0)	2 (6)
	white zone		0 (0)	1 (2)	0 (0)	2 (6)
	nodule		1 (3)	1 (2)	4 (11)	7 (20)
	rough		1 (3)	1 (2)	0 (0)	3 (9)
	adhesion		1 (3)	0 (0)	0 (0)	0 (0)
	herniation		3 (8)	4 (9)	7 (19)	2 (6)

ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1 SEX : MALE

gan	Findings_	Group Name Control	320 ppm 44 (%)	800 ppm 37 (%)	2000 ppm 35 (%)
lney	white zone	1 (3)	0 (0)	0 (0)	0 (0)
	granular	1 (3)	2 (5)	9 (24)	5 (14)
	adhesion	1 (3)	0 (0)	0 (0)	0 (0)
iitary	enlarged	1 (3)	3 (7)	1 (3)	2 (6)
	red zone	3 (8)	4 (9)	1 (3)	1 (3)
	black zone	0 (0)	0 (0)	1 (3)	0 (0)
	nodule	6 (15)	2 (5)	4 (11)	2 (6)
roid	enlarged	1 (3)	3 (7)	2 (5)	4 (11)
	nodule	1 (3)	2 (5)	0 (0)	1 (3)
nal	enlarged	0 (0)	3 (7)	1 (3)	0 (0)
is	atrophic	4 (10)	9 (20)	2 (5)	5 (14)
	nodule	23 (58)	23 (52)	26 (70)	25 (71)
/cli gl	nodule	0 (0)	1 (2)	0 (0)	0 (0)
	white	4 (10)	8 (18)	4 (11)	3 (9)
oal gl	nodule	1 (3)	2 (5)	0 (0)	0 (0)
ra	nodule	0 (0)	0 (0)	0 (0)	1 (3)
toneum	nodule	0 (0)	0 (0)	1 (3)	0 (0)
minal c	ascites	1 (3)	0 (0)	0 (0)	0 (0)
ясіс са	pleural fluid	1 (3)	0 (0)	0 (0)	0 (0)
	ascitos	0 (0)	0 (0)	1 (3)	0 (0)
r	tail:nodule	3 (8)	2 (5)	0 (0)	0 (0)
	ear:nodule	0 (0)	1 (2)	0 (0)	0 (0)

ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : AL

SEX : MALE

Organ	Findings	Group Name NO. of Animals	Control 40 (%)	320 ppm 44 (%)	800 ppm 37 (%)	2000 ррш 35 (%)
other	tail:scab		1 (3)	2 (5)	4 (11)	1 (3)
(HPT080)						BAIS 3

APPENDIX I 6

GROSS FINDINGS : SUMMARY, RAT : FEMALE

SACRIFICED ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : FEMALE

SIA .	1.1981APP					1102 - 1	
Organ	Findings	Group Name NO. of Animals	Control 37 (%)	320 ppm 40 (%)	800 ppm 42 (%)	2000 ppm 42 (%)	_
skin/app	nodule		1 (3)	0 (0)	2 (5)	1 (2)	
subcutis	jaundice		0 (0)	0. (0)	1 (2)	0 (0)	
	dry		1 (3)	0 (0)	0 (0)	0 (0)	
	mass		4 (11)	3 (8)	7 (17)	7 (17)	
lung	nodule		0 (0)	0 (0)	2 (5)	0 (0)	
spleen	enlarged		1 (3)	2 (5)	5 (12)	0 (0)	
	deformed		0 (0)	0 (0)	0 (0)	1 (2)	
tongue	nodule		1 (3)	0 (0)	1 (2)	0 (0)	
liver	white zone		0 (0)	1 (3)	0 (0)	0 (0)	
	nodule		1 (3)	1 (3)	2 (5)	6 (14)	
	rough		1 (3)	1 (3)	1 (2)	0 (0)	
	herniation		5 (14)	6 (15)	5 (12)	10 (24)	
kidney	nodule		0 (0)	0 (0)	1 (2)	0 (0)	
	granular		0 (0)	0 (0)	3 (7)	0 (0)	
urin bladd	nodule		0 (0)	1 (3)	0 (0)	0 (0)	
pituitary	enlarged		4 (11)	3 (8)	6 (14)	1 (2)	
	red zone		1 (3)	6 (15)	2 (5)	3 (7)	
	black zone		1 (3)	0 (0)	0 (0)	1 (2)	
	nodule		8 (22)	2 (5)	7 (17)	4 (10)	
	cyst	•	0 (0)	0 (0)	0 (0)	1 (2)	
thyroid	enlarged		0 (0)	1 (3)	0 (0)	0 (0)	
	nodule		1 (3)	1 (3)	2 (5)	0 (0)	

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

GROSS FINDINGS (SUMMARY) SACRIFICED ANIMALS (105W)

REPORT TYPE : A1

SEX : FEMALE

gan	Findings	Group Name Control NO. of Animals 37 (%)	320 ppm 40 (%)	800 ppm 42 (%)	2000 ppm 42 (%)
ary	cyst	0 (0)	1 (3)	3 (7)	1 (2)
erus	nodule	4 (11)	7 (18)	6 (14)	4 (10)
	mass	0 (0)	1 (3)	0 (0)	0 (0)
	cyst	2 (5)	2 (5)	2 (5)	0 (0)
па	nodule	0 (0)	0 (0)	0 (0)	1 (2)
/cli gl	nodule	0 (0)	1 (3)	1 (2)	2 (5)
in	hemorrhage	1 (3)	0 (0)	0 (0)	0 (0)
	white	1 (3)	6 (15)	1 (2)	3 (7)
le body	anemic	0 (0)	0 (0)	1 (2)	0 (0)

(IIPT080)

BAIS 3

APPENDIX J 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, RAT : MALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE UNIT: g ORGAN WEIGHT: ABSOLUTE (SUMMARY) SURVIVAL ANIMALS (105W)

PAGE: 1

oup Name	NO. of Animals	Body	Weight	ADRE	NALS	TESTI	3S	HEAR	<u> </u>	LUNG	S	KIDN	eys
Control	40	384±	42	0.070±	0.015	2.665±	1. 057	1.178±	0.118	1.442±	0. 373	2. 515±	0. 197
320 სსლ	44	359±	33**	0.081±	0.066	2. 599±	1.004	1.127±	0. 105	1.370±	0. 155	2.666土	0. 276**
800 ppm	37	330±	33**	0.083±	0. 121	2.597±	0.877	1.103±	0.091**	1.347±	0. 168	2.764±	0. 210**
2000 ppm	35	296土	30**	0.090±	0.170*	2.787土	0. 748	1. 023±	0.089**	1.377±	0.400**	2. 791±	0. 217**

(IICL040)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE UNIT: g

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

oup Name	NO. of Animals	SPLEEN	LIVER	BRAIN	
Control	40	1.570± 3.764	10.574± 2.260	2.017± 0.063	
320 ppm	44	1.566± 3.674	11.038± 1.625	2. 020 ± 0. 050	
800 թթա	37	1.035± 0.762	11. 425± 1. 535**	2. 023± 0. 053	
2000 ррт	35	1.380生 2.353	11. 545士 2. 291**	2.019± 0.054	
Significant	t difforence;	* : P ≤ 0.05 **	:: P ≤ 0.01	Tost of Dunnott	
L040)					BA

APPENDIX J 2

ORGAN WEIGHT, ABSOLUTE: SUMMARY, RAT: FEMALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE UNIT: g ORGAN WEIGHT: ABSOLUTE (SUMMARY) SURVIVAL ANIMALS (105W)

PAGE: 3

oup Name	NO. of Animals	Body	Weight	ADREI	NALS	OVAR	IES	IIEAR'	Γ	LUNG	\$	KIDN	EYS
Control	37	249±	23	0.067±	0. 011	0.129±	0.019	0.842±	0. 100	1.066±	0. 186	1.666±	0. 103
320 ppm	40	244土	27	0.067±	0.009	0.135±	0. 033	0.837±	0.077	1.046±	0. 191	1.897土	0. 300**
mqq 008	42	225±	28**	0.065±	0.010	0.142±	0. 102	0.818±	0.092	1.030±	0. 157	1.902±	0. 230**
2000 ррт	42	195±	22**	0.058±	0.013**	0. 122±	0.027	0.745±	0.050**	0.949±	0.115**	1.786±	0. 128**

(HCL040)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE UNIT: g ORGAN WEIGHT: ABSOLUTE (SUMMARY) SURVIVAL ANIMALS (105W)

PAGE: 4

roup Name	NO. of Animals	SPLE	EN	LIVI	BR .	BRA	N .	
Control	37	0.854±	1. 247	6.493±	1. 190	1.861±	0. 047	
320 թթա	40	0.743±	0.869	6.592±	1.002	1.848土	0. 042	
800 ppm	42	1.313±	2. 631	6.702±	1. 160	1.835±	0.046*	
2000 ppm	42	0.599±	0.406	6. 347±	0. 981	1.835±	0. 039∗	
Significant	t difference ;	*: P ≤ 0.0)5 * *	: P ≤ 0.01			Tost of Dunnott	
HCI 040)								DAT

(IICL040)

APPENDIX K 1

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : MALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE UNIT: % ORGAN WEIGHT: RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE: 1

oup Name	NO. of Animals	-	Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	40	384±	42	0.018± 0.003	0.706± 0.295	0.309± 0.035	0.380± 0.125	0.660± 0.071
320 ррт	44	359±	33**	0.023 ± 0.019	0.726± 0.275	0.316生 0.032	0.385± 0.057	0.750士 0.117**
800 ppm	37	330±	33**	0.027± 0.048	0.782± 0.231	0.338± 0.051**	0.415± 0.094**	0.846± 0.108**
2000 ppm	35	296±	30**	0.030± 0.054**	0.937± 0.213**	0.350± 0.049**	0.486± 0.261**	0.956士 0.150**

(IICL042)

ANIMAL : RAT 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	40	0.442± 1.186	2.770± 0.669	0.530± 0.048	
320 ppm	44	0.456± 1.151	3.091± 0.485**	0.568生 0.051*	
800 թթա	37	0.314± 0.232*	3.473± 0.403**	0.619± 0.065**	
2000 ррт	35	0.469± 0.805**	3.922± 0.757**	0. 693 ± 0. 105**	
Significan	t difference;	*: P ≤ 0.05 **:	P ≤ 0.01	Test of Dunnett	
(IICL042)					BAIS 3

APPENDIX K 2

ORGAN WEIGHT, RELATIVE : SUMMARY, RAT : FEMALE (2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX: FEMALE UNIT: %

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

oup Name	NO. of Animals	Body We	eight g)	ADRENALS	OVARIES	DEART	LUNGS	KIDNEYS
Control	37	249±	23	0.027± 0.004	0.052± 0.009	0.340± 0.040	0.431± 0.079	0.672± 0.046
320 ppm	40	244土	27	0.027± 0.004	0.056± 0.016	0.344± 0.027	0.434± 0.109	0.784± 0.157**
800 ppm	42	225±	28**	0.029± 0.005	0.063± 0.040	0.370± 0.074*	0.466± 0.104	0.854± 0.116**
2000 ppm	42	195±	22**	0.030± 0.010	0.063 ± 0.015**	0.385± 0.035**	0.492± 0.077*	0.924± 0.086**

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE UNIT: % ORGAN WEIGHT: RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

PAGE: 4

roup Name	NO. of Animals	SPLEEN	LIVER	BRAIN	
Control	37	0.346± 0.488	2.606± 0.388	0.754± 0.078	
320 ppm	40	0.308± 0.374	2. 697± 0. 283	0.766生 0.097	
800 ppm	42	0.619± 1.269	2.996± 0.503**	0.830± 0.118**	
2000 ррт	42	0.315± 0.230*	3. 277 ± 0. 512**	0.953± 0.104**	
Significant	t difference ;	*: P ≤ 0.05 **:	P ≤ 0.01	Test of Dunnett	
HCI 042)			•		DATC

(HCL042)

APPENDIX L 1

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY

RAT: MALE: ALL ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

		ip Name of Animals on Study		Cont 50						20 p 50	pm					00 r 49	pm					00 p 50	mqu	
.gair	Grad	·		2	3 (%)	(%)		<u>1</u> (%)	2 (%)		<u>3</u> (%)	<u>4</u> (%)		<u>1</u> (%)	(%)		<u>3</u> (%)	<u>4</u> (%)	•	<u>1</u> (%)	(%)		3 (%)	4 (%)
															•									
Integumentar	y system/appandage}																							
kin/app	fibrosis		l (<50>	0	0	(0	1	(50>	0	0 (0)	(0 0)	0		0 (0	0	(0	0		0 0) (0
			<i>5)</i> ((,, (0,	(0)	,	u,	(2,	,	u,	(0)		0,	, 0,	`	0, (. 07		0,	. 0,	`	0, (. 0
	hyperplasia:epidermis		0) (())) (0 0)	0 (0)	(1 2)	0 (0)		0	0 (0)	(0	(0)		0 (0 (0)	(1 2)	(0)		0 0) (0
	scab		1 (2) (() ()	0 0)	0 (0)	(3 6)	0 (0)	(0	0 (0)	(4 8)	(2)	(0 0) (0 (0)	(1 2)	(0)		0 (0)	0
	epidermal cyst		2 (4) (()) (0	0 (0)	(2 4)	0 (0)	· (0 0)	0 (0)	(0	0 (0)	(0	0 (0)	(1 2)	0 (0)		0	0
Respiratory	system)																							
asal cavit	thrombus		3 (6) ((<500 0 0) (0	0 (0)	(2 4)	0		0 0)	0 (0)	(3 6)	0		0	0	(2 4)	0		0	0)
	mineralization	3 (7	8 (0 0) (0 0)	0 (0)	(30 60)	0 (0)		0 0)	0 (0)	(29 59)	0		0 0)	0		31 62)	0		0	0)
	cosinophilic change olfactory epithelium		8 6) (1:	6 2) (1 2)	0 (0)	(32 64)	10 (20)		0	0 (0)	(22 45)	11 (22		0	0		30 60)	10 (20		2 4)	((
Grade <a>> b (c)	1: Slight 2: Moderate 3: Maa: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100	arked 4: Sev	ere																					

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

PAGE: 2

		roup Name o. of Animals on Study	Cont 50					mqq 0				800 49	ppm				2000 50		
rgan		rade <u>1</u> (%)	2	(%)	<u>4</u> (%)	(%)	(%)	3 (%)	<u>4</u> (%)	<u>1</u> (%)		2 (%)	3 (%)	(%)	1(%)	2 (%)	3 (%)	(%)
Respiratory	system)																		
asal cavit	inflammation:foreign body	15 (30)	<50) 0 (0) (0	0 (0)	10 (20)	1	1 (2)	0 (0)	9 (18)	(<49 0 0) () 1 2)	0 (0)	11 (22		<50 2 4) (0	0 (0)
	inflammation:respiratory epithelium	7 (14)	0 (0) (0	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	(0	0 0)	0 (0)	2 (4		0	0 0)	0 (0)
	inflammation:olfactory epithelium	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)
	respiratory metaplasia:olfactory epithe		0 (0) (0	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	(0	0 0)	0 (0)	0		0	0 0)	0 (0)
	squamous cell metaplasia:respiratory ep		0 (0) (0	0	1 (2)	0 (0)	0 (0)	0 (0)	(0)	(0	0 (0)	0 (0)	0		0	0 0)	0 (0)
ung	congestion	(2)	<50: 0 (0) (0	0 (0)	3 (6)	0		0 (0)	4 (8)		<49 0 0) (0 (0)	0 (0)	5 (10		<50 0 0) (0	0 (0)
	hemorrhage	1 (2)	0 (0) (0	0	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)		0	0 (0)	0	(2	2) (0	0 (0)	0 (0)
	inflammatory infiltration	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)

< a >

a: Number of animals examined at the site

b

b: Number of animals with lesion

c:b/a * 100

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

SEX

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

: MALE

320 ppm 800 ppm 2000 ppm Group Name Control 50 49 50 No. of Animals on Study 50 Grade (%) (%) (%) (%) (%) (%) (%) (%) (%) Findings_ Organ_ (Respiratory system) <50> <50> lung <50> <49> 0 0 0 0 0 0 0 0 0 0 foreign body granuloma 0 (2)(0)(0)(0) (0)(0)(0)(0) (2)(0)(0)(0) (0)(0)(0)(0) osseous metaplasia 0 (4)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) 0 0 accumulation of foamy cells (0)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) (2)(0)(0)(0) 0 bronchopneumonia (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (2)(0)(0)(0) 0 0 0 0 4 0 0 0 2 0 bronchiolar-alveolar cell hyperplasia 0 0 (4)(4)(0)(0) (2)(2)(0)(0) (8)(0)(0)(0) (8)(0)(0)(0) {| lematopoietic system <50> <50> <49> bone marrow 0 0 0 0 atrophy: focal (6)(0)(0)(0) (6)(0)(0)(0) (4)(0)(0)(0) (2)(0)(0)(0) 1 granulation (2)(0)(0)(0) (4)(0)(0)(0) (4)(0)(0)(0) (2)(0)(0)(0) 2 : Moderate 3 : Marked 4 : Severe 1 : Slight Grade a : Number of animals examined at the site <a>> 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

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

: A1

		roup Name Control o. of Animals on Study 50	320 ppm 50	800 ppm 49	2000 ppm 50
Organ	Findings	rade <u>1 2 3 4</u> (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
{Hematopoieti	c system)				
bone marrow	increased hematopoiesis	<50> 7 1 0 0 (14) (2) (0) (0)	3 0 0 0 (6) (0) (0) (0)	6 0 0 0 (12) (0) (0) (0)	<50> 5 0 0 0 (10) (0) (0) (0)
lymph node	lymphodenitis	<50> 2 0 0 0 (4) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<49> 0 0 0 0 0 0 0 0 0 0 0	<50> 0 0 0 0 (0) (0) (0) (0)
sploen	thrombus	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<49> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<50> 0 0 1 0 (0) (0) (2) (0)
	deposit of hemosiderin	32 0 0 0 (64) (0) (0) (0)	37 3 0 0 (74) (6) (0) (0)	33 3 0 0 (67) (6) (0) (0)	27 2 0 0 (54) (4) (0) (0)
	fibrosis	1 1 1 0 (2) (2) (2) (0)	1 3 0 0 (2) (6) (0) (0)	3 1 0 0 (6)(2)(0)(0)	0 1 3 0 (0) (2) (6) (0)
	extramedullary hematopoiesis	5 2 5 0 (10) (4) (10) (0)	7 0 0 0 (14) (0) (0) (0)	4 1 2 0 (8) (2) (4) (0)	3 1 0 0 (6) (2) (0) (0)
{Circulatory	system)				
heart	thrombus	(50) 1 0 0 0 (2) (0) (0) (0)	<pre></pre>	<49> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<50> 0 0 0 0 (0) (0) (0) (0)
Grado <a>> b (c) Significant d	 a: Number of animals examined at the sit b: Number of animals with lesion c: b / a * 100 				

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj REPORT TYPE : AL

ALL ANIMALS (0-105W)

rgan	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 50 2 3 (%) (%)	4_	<u>1</u> (%)	320 p 50 2 (%)	3 4 (%) (%)	1 (%)		9th 3 4 (%)	1 (%)	2000 ppm 50 2 3 (%) (%)	<u>4</u> (%)
Circulator	y system}												
art	fibrosis:focal	0 (0)	<50> 0 0 0) (0)		1 (2) (0 0	2 (4)		0 0 0) (0)	1 (2) (<50> 0 0 0) (0)	0 (0)
	myocardial fibrosis	22 (44)	0 0		27 (54) (0 0	23 (47)		0 0	25 (50) (0 0	0 (0)
	arteritis	(2)	0 0		1 (2) (0 (0 0 0 0) (0)	0 (0)	0 (0) (0 0	(0) (0 0	0 (0)
igestive	system)												
oth	inflammation	9 (18)	<50> 0 0 0 0) (0)		6 (12) (0 0	7 (14)		0 0	(8) (<50> 0 0 (0) (0)	0 (0)
omach	ulcer:forestomach		<50> 1 0 2) (0)		0 (0) (0 0	0 (0)		0 0	3 (6) (<50> 0 0 (0) (0)	0 (0)
	erosion:glandular stomach	1 (2)	0 0		0 (0) (0 (0 0	2 (4)	0 (0) (0 0 0 0) (0)	4 (8)	0 0	(0)
ade a > b c) gnificant	1: Slight 2: Moderate a: Number of animals examined at the b: Number of animals with lesion c: b/a * 100 difference; *: P ≤ 0.05 **: P		3										

(HPT150)

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : MALE

Organ	Findings	Group Name		Cont 50 2 %)	3 (%)	<u>4</u> (%)	1 (%)		320 50 <u>2</u> (%)	3 (%)	<u>4</u> (%)	<u>(</u>	<u>1</u> %)	80 4 2 (%)	0 ppm 9 3 (%)		<u>4</u> (%)	1 (%)	.)			pm 3	<u>4</u> (%)
{Digestive s	system)										•		٠										
stomach	squamous cell hyperplasia:forestomacl		3 6) (<50) 0 0) (0	0 (0)	0 (0)		<50 0 0) (0	0) 0) (0	.9> 0 (0)		0	5 (10)		0		0 0) (0 0)
liver	herniation		4 3) (<500 0 0) (0	0 (0)	6 (12)		<50 0 0) (0	0 (0)		8 6) (0	(0)	(0 0)	5 (10		0		0 0) (0 0)
	necrosis:central		0 0) (0 0) (0	0 (0)	0 (0)		1 2) (0 0)	0 (0)		0 0) (0 0)	0 (0)		0 0)	0		1 2)		0 0) (0 (0)
	granulation	2: (4:	2 4) (0 0) (0	0 (0)	14 (28)) (3 6)	0 (0)	0 (0)		4 9) (0 0)	0 (0)		0	15 (30		1 2)		0 0) (0 (0)
	clear cell focus		3 6) (0 0) (0 0)	0 (0)	0) (0	0 (0)	0 (0)		1 2) (0 0)	0 (0)		0	4	4 3) (0 0)	(1 2) (0 (0)
	acidophilic cell focus		1 2) (0 0) (0 0)	0 (0)	5 (10		0	0 (0)	0 (0)		4 8) (0	0 (0)		0	5 (10		2 4)		0	0
	basophilic cell focus		9 8) (0 0) (0	0 (0)	8 (16		0	0 (0)	0 (0)		.5 (1)	7 14)	0		0 **	16 (32		7 14)		0	0 ** (0)
	spongiosis hepatis		0 0) (0 0) (0	0 (0)	0)		0	0 (0)	0 (0)		1 2)	0 (0)	0 (0		0		1 2) (0 (0)		0	0

Grade

1 : Slight

2 : Moderate

3 : Marked

4 : Severe

< a >

a : Number of animals examined at the site

ь

b: Number of animals with lesion

c:b/a * 100

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

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

REPORT TYPE: AL SEX: MALE

Organ	No.	oup Name Control of Animals on Study 50 ade 1 2 3 4 (%) (%) (%) (%)	320 ppm 50 1 2 3 4 (%) (%) (%) (%)	800 ppm 49 1 2 3 4 (%) (%) (%) (%)	2000 ppm 50 1 2 3 4 (%) (%) (%)
	144				
{Digestive s	system}				
liver	bile duct hyperplasia	\(\langle 50 \rangle \) 43 7 0 0 (86) (14) (0) (0)	<50> 42 7 0 0 (84) (14) (0) (0)	<49> 37 12 0 0 (76) (24) (0) (0)	<50> 39 9 0 0 (78) (18) (0) (0)
	cholangiofibrosis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
pancreas	atrophy	(50) 7 0 0 0 (14) (0) (0) (0)	(50) 13 2 0 0 (26) (4) (0) (0)	49> 13 0 1 0 (27) (0) (2) (0)	5 0 0 0 (10) (0) (0)
	islet cell hyperplasia	5 0 0 0 (10) (0) (0) (0)	3 0 0 0 0 (6) (6) (7)	1 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
{Urinary sy	stem)				
kidney	infarct	(50> 1 0 0 0 (2) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)	<pre></pre>	(50) 1 0 0 0 (2) (0) (0) (0)
	chronic nephropathy	10 25 13 0 (20) (50) (26) (0)	3 13 28 2 ** (6) (26) (56) (4)	4 15 26 3 * (8) (31) (53) (6)	3 7 36 2 *** (6) (14) (72) (4)
Grade <a> b (c) Significant	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100 c difference; *: P ≤ 0.05 **: P ≤ 0				

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

		Group Name Control No. of Animals on Study 50	320 ppm 50	800 ppm 49	2000 ppm 50				
Organ		Grade 1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)				
{Urinary syst	tem)								
kidney	hydronephrosis	\(\frac{50}{0} \) \(\begin{pmatrix} 1 & 0 & 0 & 0 \\ (2) & (0) & (0) & (0) \end{pmatrix}	0 0 0 0 (0) (0) (0) (0)	<49> 0 0 0 0 0 0 0 0 0 0	<50> 0 0 0 0 (0) (0) (0) (0)				
	papillary necrosis	1 0 0 0 0 (2) (0) (0) (0)	12 0 0 0 ** (24) (0) (0) (0)	14 1 0 0 ** (29) (2) (0) (0)	20 4 0 0 ** (40) (8) (0) (0)				
	mineralization:papilla	3 0 0 0 0	2 0 0 0 0 (4) (0) (0) (0)	11 0 0 0 * (22) (0) (0) (0)	19 0 0 0 *** (38) (0) (0) (0)				
	dilatation:tubular lumen	1 0 0 0 (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)				
	urothelial hyperplasia:pelvis	16 0 0 0 (32) (0) (0) (0)	18 0 0 0 (36) (0) (0) (0)	25 0 0 0 (51) (0) (0) (0)	25 1 0 0 (50) (2) (0) (0)				
urin bladd	transitional cell hyperplasia	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<49> 0 0 0 0 0 0 0 0 0	(50) 1 0 0 0 (2) (0) (0) (0)				
{Endocrine s	ystem)								
pituitary	cyst	2 0 0 0 0 (4) (0) (0) (0)	5 0 0 0 (10) (0) (0) (0)	<49> 5 0 0 0 (10) (0) (0) (0)	\(\frac{50}{1} \) \(1 \) 1 \(0 \) 0 \(2) \(2) \(0) \(0) \)				
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤								

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

PAGE: 9

Organ		Group Name No. of Animals on Study	Control 50		320 ppm 50					800 ppm 49					2000 ppm 50							
	Findings_	Grade 1 (%)	(%)	3 (%)	(%)	(%)	(%)	<u>3</u> (%		<u>4</u> (%)	(<u>1</u> %)	2 (%)	(%))	<u>4</u> (%)	-	1 (%)	(%)	:	3 %)	<u>4</u> (%)
Endocrine s	ystem)																					
pituitary	hyperplasia	12 (24)	<50 0 (0) (0	0 (0)	16 (33)	0	49> 0 (0		0 0)	1 (2		0	9> 0		0 0)		11 22)	(0)		0 0) (0 (0)
	Rathke pouch	4 (8)	0 (0) (0 (0)	0 (0)	4 (8)	0 (0)	0 () (0 0)	(2 4) (0 0)	0		0	(3 6)	0 (0)		0 0) (0 (0)
	aberrant craniopharyngeal tissue	(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
thyroid	ultimibranchial body remanet	0 (0)	0 (0) (0	0 (0)	1 (2)	0	50> 0 (0) (0 0)		1 2) (0	19> 0 (0		0 0)		0	0 (0)		0 0) (0 (0)
	C-cell hyperplasia	4 (8)	0 (0) (0 (0)	0 (0)	6 (12)	0 (0)	(0))) (0 0)	(3 6) (0	(0) (0 0)	(4 8)	1 (2)	(0 0) (0 (0)
adrenal	hyperplasia:cortical cell	6 (12)	<5(0 (0)	0	0 (0)	4 (8)	0))) (0 0)	(1	5 .0) (0	(0) (0	(1 2)	0 (0)		0 0) (0 (0)
	hyperplasia:modulla	(8)	0 (0)	0	0 (0)	5 (10)	0 (0)	(0		0 0)		4 8) (0 0)	0		0	(4 8)	0		0 0) (0

< a >

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

b (c)

c:b/a*100

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

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

PAGE: 10

0rgan		roup Name) ppm	2000 ppm 50						
		o. of Animals on Study rade 1 (%)	2 (%)	3 (%)	(%)	<u>1</u> (%)	2 (%)	(%)	(%)	<u>1</u> (%)	2 (%)	3 (%)	<u>4</u> (%)	<u>1</u> (%)	2 (%)	3 (%)	(%)
Endocrine sys	stem)																
ndrenal	focal fatty change:cortex	0 (0)	<50 0 (0) (0	0	0 (0) (<50 0 0) (0	0 (0)	1 (2)	<4 0 (0)	0	0 (0)	0 (0)	0	50> 0 (0)	0 (0)
{Reproductive	system}																
testis	atrophy	41 (82)	<50 0 (0) (0	0 (0)	40 (80)	<50 0 0)	0	0 (0)	41 (84)	<4 0 (0)	9> 0 (0)	0 (0)	32 (64)	0	50> 0 (0)	0 (0)
	arteritis	1 (2)	0 (0) (0 0)	0 (0)	3 (6) (0 0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	interstitial cell hyperplasia	5 (10)	0 (0) (0 (0)	0 (0)	(8)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
epididymis	arteritis	0 (0)	<50 0 (0) (0	0 (0)	1 (2)	<50 0 (0)	0	0 (0)	0 (0)	<4 0 (0)	0	0 (0)	0 (0)	0	50> 0 (0)	0 (0)
prostate	inflammation	10 (20)	<50 0 (0) (0	0 (0)	16 (32)	<5(0 (0)	0	0 (0)	5 (10)	<4 1 (2)	0	0 (0)	9 (18)	0	50> 0 (0)	0 (0)
Grade (a) b (c)	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 ifference; *: P ≤ 0.05 **: P ≤ 0																

(IIPT150)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 50 2 3 (%) (%)	<u>4</u> (%)	<u>1</u> (%)	320 pp 50 2 :	pm 3 4 %) (%)	<u>1</u> (%)	800 49 2 (%)	3 4 (%) (%)	1 (%)	2000 ppr 50 2 3 (%) (%	4_
									,				
{Reproductive	re system)												
prostate	hyperplasia	5 (10)	<50> 0 0 (0) (0)	0 (0)	9 (18) (0 0	6 (12) (<49) 0 0) (0 0 0	9 (18)	<50> 0 0 (0) (0	
mammary gl	duct ectasia	(0)	<50> 0 0 (0) (0)	0 (0)	1 (2) (0 0 0) (0)	0 (0) (<49) 0 0) (0 0	1 (2)	<50> 0 0 (0) (0	
	galactocelo	6 (12)	0 0	0 (0)	6 (12) (0 0	5 (10) (0 (0 0	8 (16)	0 0	
{Nervous sys	stem}												
brain	lienorrliage	1 (2)	<50> 0 0 (0) (0)	0 (0)	0 (0)		0 0	0 (0) (<491 0 0) (0 0 0 0 0) (0)	0 (0)	<50> 0 0 (0) (0	
{Special sen	ise organs/appendage)												
eye	cataract	9 (18)	<50> 0 0 (0) (0)	0 (0)	12 (24)		0 0 0 0) (0)	8 (16) (<49 0 0 (0 0 0) (0)	12 (24)	<50> 0 ((0) (0	
Grade <a>> b (c) Significant	1: Slight 2: Moderate a: Number of animals examined b: Number of animals with lesi c: b / a * 100 difference; *: P ≤ 0.05		9										

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

MALE PAGE: 12

		oup Name Control	320 ppm 50	800 ppm 49	2000 ppm 50				
Organ		ade 1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)				
Special sens	se organs/appendage)								
eye	retinal atrophy	<50> 3 0 0 0 (6) (0) (0) (0)	<50> 6 0 0 0 (12) (0) (0) (0)	<49> 5 0 0 0 (10) (0) (0) (0)	<50> 5 0 0 0 (10) (0) (0) (0)				
	keratitis	0 0 0 0 0 (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)				
	iritis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)				
	mineralization:cornea	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 0 (0) (0)				
Harder gl	lymphocytic infiltration	\(\langle 50 \rangle \) 15	<50> 11 1 0 0 (22) (2) (0) (0)	(49) 13 0 0 0 (27) (0) (0) (0)	(50) 12 0 0 0 (24) (0) (0) (0)				
Zymbal gl	inflammation	(50) 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 1 0 (0) (0) (2) (0)	<49> 0 0 0 0 0 0 0 0 0 0 0	(50) 0 0 0 0 (0) (0) (0) (0)				
{Body caviti	es)								
peritoneum	peritonitis	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 1 0 (0) (0) (2) (0)	<49> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)				
Grade < a > b (c)	1: Slight 2: Moderate 3: a: Number of animals examined at the sit b: Number of animals with lesion c: b / a * 100	Marked 4 : Severe							

(HPT150)

BAIS3

APPENDIX L 2

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY

RAT: FEMALE: ALL ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 : FEMALE

2000 ppm 50 Group Name Control 320 ppm 800 ppm No. of Animals on Study

	No. of Animals	on Study 50	50	50	50
Orana	Grade Findings	<u>1 2 3 4</u> (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Organ	r indings	(%) (%) (%)	(%) (%) (%)		(%) (%) (%)
{Respiratory	y system)				
nasal cavit		<50>	<50>	<50>	<50>
	thrombus	1 0 0 0 (2) (3) (4) (4)	3 0 0 0 0 (6) (6) (7)	3 0 0 0 0 (6) (6) (7)	3 0 0 0 0 (6) (6) (7)
			(0, (0, (0,	(,, (), (), (),	(0, (0, (0,
	mineralization	19 0 0 0	18 0 0 0	20 0 0 0	23 0 0 0
		(38) (0) (0) (0)	(36) (0) (0) (0)	(40) (0) (0) (0)	(46) (0) (0) (0)
	eosinophilic change:olfactory epithelium	19 22 3 0	22 24 1 0	20 27 0 0	18 30 1 0
	eosmophilic change-offactory epitherium	(38) (44) (6) (0)	23 24 1 0 (46) (48) (2) (0)	20 27 0 0 (40) (54) (0) (0)	(36) (60) (2) (0)
	inflammation:foreign body	0 0 0 0 0 (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	3 0 0 0 0 (6) (6) (0) (0)	0 0 0 0
		(0) (0) (0) (0)	(2) (0) (0) (0)	(6) (0) (0) (0)	(0) (0) (0) (0)
	inflammation:respiratory epithelium	1 0 0 0	0 0 0 0	1 0 0 0	1 0 0 0
		(2) (0) (0) (0)	0 0 0 0 0 0 (0)	1 0 0 0 0 (2) (0) (0)	(2) (0) (0) (0)
	•				
	squamous cell metaplasia:respiratory epithelium	1 0 0 0 0 (2) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
lung		<50>	<50>	<50>	<50>
	congestion	6 0 0 0 (12) (0) (0) (0)	5 0 0 0 (10) (0) (0) (0)	3 0 0 0 0 (6) (6) (7)	3 0 0 0 0 (6) (6) (0) (0)
	hemorrhage	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:b/a * 100

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

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

VER VAIMVES (0-10

		Group Name No. of Animals on Study	Control 50 2 3 4	320 ppm 50	800 ppm 50	2000 ppm 50
r.gaji	Findings	Grade <u>1</u> (%)	2 3 4 (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
Respiratory	svstem)					
ing	edema	0 (0)	<50> 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	osseous metaplasia	1 (2)	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)
	accumulation of foamy cells	0 (0)	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	bronchiolar-alveolar cell hyperplasia	3 (6)	1 0 0 (2) (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 0 0 0 0 0 0 0 0
Hematopoieti	c system}					
ne marrow	atrophy:focal	5 (10)	<50> 1 0 0 (2) (0) (0)	(50) 14 1 0 0 (28) (2) (0) (0)	<50> 11 0 0 0 (22) (0) (0) (0)	<50> 8 2 0 0 (16) (4) (0) (0)
	granulation	2 (4)	0 0 0 0 (0) (0)	4 0 0 0 0 (8) (0) (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	3 0 0 0 0 (6) (6) (0) (0)
	increased hematopoiesis	2 (4)	0 0 0 0 (0) (0)	3 0 0 0 0 (6) (6) (7)	3 0 0 0 0 (6) (6) (0) (0)	2 0 0 0 0 (4) (0) (0) (0)
rade a > b	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100	: Marked 4 : Severe				

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE PAGE: 15

Organ	Findings	Group Name Control No. of Animals on Study 50 Grade 1 2 3 4 (%) (%) (%) (%) (%)	320 ppm 50 1 2 3 4 (%) (%) (%) (%)	800 ppm 50 1 2 3 4 (%) (%) (%) (%)	2000 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Hematopoiet	cic system)				
lymph node	lymphadenitis	(50) 1 0 0 0 (2) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)	<pre></pre>
spleen	deposit of hemosiderin	<50> 15 26 0 0 (30) (52) (0) (0)	<50> 17 25 1 0 (34) (50) (2) (0)	<50> 12 28 0 0 (24) (56) (0) (0)	<50> 16 22 0 0 (32) (44) (0) (0)
	fibrosis	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)	1 0 0 0 0 (2) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	extramedullary hematopoiesis	7 1 4 0 (14) (2) (8) (0)	5 0 2 0 (10) (0) (4) (0)	4 4 2 0 (8) (8) (4) (0)	7 1 0 0 (14) (2) (0) (0)
{Circulatory	system)				
heart	thrombus	(50) 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)	<pre></pre>
	necrosis:focal	0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
Grade <a> a > b (c) Significant	1: Slight 2: Moderate a: Number of animals examined at the s b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P				

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

...

PAGE: 16

		Animals on Study 50	320 ppm 50	800 ppm 50	2000 ppm 50
Organ	Grade _ Findings	<u>1 2 3 4</u> (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
{Circulator	ry system)				
ıeart	mineralization	(50) 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	inflammatory cell nest	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)
	fibrosis:focal	0 0 0 0 0 (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	myocardial fibrosis	22 0 0 0 (44) (0) (0) (0)	30 0 0 0 (60) (0) (0) (0)	23 0 0 0 (46) (0) (0) (0)	23 0 0 0 (46) (0) (0) (0)
Digestive	system)				
ooth	inflammation	<50> · 0 0 0 0 (0) (0) (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)
ongue	squamous cell hyperplasia	(50) 1 0 0 0 (2) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
Grade (a > b (c) Significan	1: Slight 2: Moderate 3: Mark a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100 t difference; *: P ≤ 0.05 **: P ≤ 0.01	ed 4: Severe Test of Chi Square			

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

Organ	Findings	Group Name No. of Animals on Study Grade	Con 50 2 (%)	3 (%)	<u>4</u> (%)	1 (%)		20 ppm 50 3 (%)	4_	(1 %)	800 50 2 (%)) ppm) 3 (%)	<u>4</u> (%)	<u>1</u> (%	<u>;)</u>		00 ppm 50 3 (%)	 <u>4</u> (%)
{Digestive s	system)						•												
tomach	basal cell hyperplasia	0 (0)	<50 0 (0) (0	0 (0)	0 (0)	0	50> 0 (0)	0 (0)		0 0) (<50 0 0)	0	0 (0)	3		0	50> 0 (0)	0 0)
	ulcer:forestomach	0 (0)	1 (2) (0 0)	0 (0)	1 (2)	1 (2)	(0)	0 (0)		1 2) (1 2)	1 (2)	0 (0)	0)		1 2)	0 (0)	0 0)
	erosion:glandular stomach	(0)	0 (0) (0 0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	(0 0) (0 0)	0 (0)	0 (0)	(2		0 0)	0 (0)	0 0)
	squamous cell hyperplasia:forestomach		0 (0) (0 0)	0 (0)	3 (6)	(0)	0 (0)	0 (0)		3 6) (0	0 (0)	0 (0)		4 3) (0 0)	(0)	0 0)
iver	herniation	8 (16)	<50 0 (0) (0	0 (0)	6 (12)	0		0 (0)		8 6) (<5 0 0)	0	0 (0)	11 (22		0	50> 0 (0)	0 0)
	necrosis:central	1 (2)	0 (0) (0 (0)	0 (0)	0 (0)	(0)	0 (0)	0 (0)		2 4) (0	0 (0)	0 (0)		0 0) (0 0)	0 (0)	0 0)
	fatty change:central	0 (0)	0 (0) (0 (0)	0 (0)	0 (0)	(0)		0 (0)		1 2) (0	0 (0)	0 (0)		0 0) (0	0 (0)	0
	granulation	23 (46)	8 (16) (0 (0)	0 (0)	20 (40)	4 (8)		0 (0)		.6 32) (4 8)	0 (0)	0 (0)	23 (46		2 4)	1 (2)	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

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

	1	roup Name Cont (o. of Animals on Study 50 (rade <u>1 2</u>	3 4	320 ppm 50 1 2 3 4	800 ppm 50 1 2 3 4	2000 ppm 50 1 2 3 4
rgan	Findings	(%) (%)	(%) (%)	(%) (%) (%) (%)	(%) (%) (%)	(%) (%) (%) (%)
Digestive s	ystem}					
iver	acidophilic cell focus	(50) 1 0 (2) (0) (0 0	0 0 0 0 0 0 (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)
	basophilic cell focus	3 1 (6) (2) (0 0 0 0) (0)	3 1 0 0 (6) (2) (0) (0)	4 0 1 0 (8) (9) (9)	6 0 0 0 0 (12) (0) (0) (0)
	bile duct hyperplasia	8 1 (16)(2)(0 0	10 0 0 0 (20) (0) (0) (0)	10 1 0 0 (20) (2) (0) (0)	12 0 0 0 (24) (0) (0) (0)
	cholengiofibrosis	1 0 (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)
ancreas	atrophy	3 0 (6) (0) (0 0	3 0 0 0 (6) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)	4 0 0 0 (8) (0) (0) (0)
	islet cell hyperplasia	0 0 (0) (0 0 0 0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (3) (4)	0 0 0 0 0 0 (0) (0)
(Urinary sys	tem)					
cidney	infarct	<500 0 0 (0) (0) (0 0	(50) 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)
Grade < a > b (c)	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion	Marked 4 Severe		••••		

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX

: FEMALE

PAGE: 19

Organ		Group Name No. of Animals on Study Grade 1 (%)	Cont 50 2 (%)	3 (%)	<u>4</u> (%)	<u>1</u> (%)	320 50 2 (%)) ppm) 3 (%)	<u>4</u> (%)	<u>1</u> (%)	(800 50 2 (%)	3 (%)	<u>4</u> (%)	1 (%		2000 50 2 (%)		<u>4</u> (%)
{Urinary sys	tem}																		
kidney	cyst	1 (2)	(50) 0 (0) (0	0) 0·	0	<50 0 0	0	0 (0)	0 (0)		<502 0 0) (0 0) (0 0)	0		<50 0 0) (0 0)	0 (0)
	chronic nephropathy	15 (30)	2 (4) (2 4) (0 0)	18 (36)	6 (12)	7 (14)	0 *	16 (32)		.3 26) (6 12) (0 ** 0)	31 (62		6 12) (0 0)	0 ** (0)
	hydronephrosis	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)
	papillary necrosis	0 (0)	0 (0) (0	0	7 (14)	0 (0)	0 (0)	0 * (0)	23 (46)	(0 0) (0	0 **			19 38) (2 4)	0 ** (0)
	mineralization:papilla	3 (6)	0 (0) (0	0 0)	3 (6)	0	0 (0)	0 (0)	6 (12)	(1 2) (0	0 0)	22 (44	;	1 2) (0	0 **
	urothelial hyperplasia:pelvis	9 (18)	0 (0) (0	0 0)	9 (18)	0	0 (0)	0 (0)	9 (18)		0 (0	0	0 (0)	27 (54		0	0	0 **
urin bladd	transitional cell hyperplasia	0 (0)	<500 0 (0) (0	0	0 (0)	<5 0 (0)	0	0 (0)	2 (4)		<50 0 0) (0 0)	0))) (<50 0 0) (0	0 (0)
	nodular hyperplasia:transitional epith		0 (0) (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)

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

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

Organ	1	Group Name Control No. of Animals on Study 50 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 50 1 2 3 4 (%) (%) (%) (%)	800 ppm 50 1 2 3 4 (%) (%) (%) (%)	2000 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Endocrine	system)				
pituitary	cyst	<50> 12 0 0 0 (24) (0) (0) (0)	(50) 16 2 0 0 (32) (4) (0) (0)	\(\langle 50 \rangle \) 15	(49) 19 2 0 0 (39) (4) (0) (0)
	hyperplasia	8 0 0 0 (16) (0) (0) (0)	16 0 0 0 (32) (0) (0) (0)	13 0 0 0 (26) (0) (0) (0)	11 0 0 0 (22) (0) (0) (0)
	Rathke pouch	0 0 0 0 0 (0)	2 0 0 0 0 (4) (0) (0) (0)	2 0 0 0 0 (4) (0) (0) (0)	0 0 0 0 0 (0) (0)
thyroid	ultimibranchial body remanet	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
	C-cell hyperplasia	6 0 0 0 (12) (0) (0) (0)	6 0 0 0 (12) (0) (0) (0)	4 0 0 0 0 (8) (0) (0) (0)	8 0 0 0 (16) (0) (0) (0)
adrenal	peliosis-like lesion	30 0 0 0 (61) (0) (0) (0)	<50> 26 0 0 0 (52) (0) (0) (0)	<50> 25 0 0 0 (50) (0) (0) (0)	<50> 21 0 0 0 (42) (0) (0) (0)
	hyperplasia:cortical cell	9 0 0 0 0 (18) (0) (0) (0)	4 0 0 0 0 (8) (0) (0)	5 0 0 0 0	3 1 0 0 (6)(2)(0)(0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 ***: P ≤				

(IIPT150)

BAIS3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

Organ	М	roup Name Control o. of Animals on Study 50 rade 1 2 3 4 (%) (%) (%) (%)	320 ppm 50 1 2 3 4 (%) (%) (%) (%)	800 ppm 50 1 2 3 4 (%) (%) (%) (%)	2000 ppm 50 1 2 3 4 (%) (%) (%) (%)
{Endocrine	system}				
adrenal	hyperplasia:medulla	(49) 1 0 0 0 (2) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>
	focal fatty change:cortex	0 0 0 0 0 (0)	5 0 0 0 (10) (0) (0) (0)	4 0 0 0 0 (8) (0) (0) (0)	4 0 0 0 0 (8) (0) (0) (0)
(Roproducti	ve system}				
vary	cyst	<50> 0 0 0 0 (0) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)	<50> 2 0 0 0 (4) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
terus	dilatation	<50> 1 0 0 0 (2) (0) (0) (0)	<50> 1 0 0 0 (2) (0) (0) (0)	(50) 0 0 0 0 (0) (0) (0) (0)	<pre></pre>
	decidual change	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)
	hyperplasia:epithelium	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)
Grade (a) b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 t difference; *: P ≤ 0.05 **: P ≤				

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

	N	coup Name Control o. of Animals on Study 50 cade 1 2 3	4 1	320 ppm 50 23 4_	800 ppm 50 1 2 3 4	2000 ppm 50 _1 2 3 4
rgan	Findings	(%) (%) (%)	(%)	(%) (%) (%)	(%) (%) (%) (%)	(%) (%) (%) (%)
Reproductive	e system)					
terus	cystic endometrial hyperplasia	<50> 0 0 0 (0) (0) (0)	0 3 (6) (<50> 0 0 0 0) (0) (0)	3 0 0 0 (6) (0) (0) (0)	(50) 1 0 0 0 (2) (0) (0) (0)
agina	edema	<50> 0 0 0 (0) (0) (0)	0 0 (0) (<50> 0 0 0 0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 1 0 0 (0) (2) (0) (0)
nmmary gl	galactocele	(50> 1 0 0 (2) (0) (0)		<50> 0 0 0 0) (0) (0)	<50> 7 0 0 0 (14) (0) (0) (0)	<50> 2 0 0 0 (4) (0) (0) (0
Vervous syst	tom)					
rain	hemorrhage	<50> 1 0 0 (2) (0) (0)		<50> 0 0 0 0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)	<50> 0 0 0 0 (0) (0) (0) (0)
	gliosis	0 0 0 0	0 0 0 (0) (1 0 0 0 2) (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
Special sens	se organs/appendage)					
уе	calaract	50> 5 0 0 (10) (0) (0)		<50> 0 0 0 0) (0) (0)	<pre></pre>	<50> 6 0 0 0 (12) (0) (0) (0
Frade (a >	1: Slight 2: Moderato 3: a: Number of animals examined at the sit b: Number of animals with lesion c: b/a * 100	Marked 4 Sovere				

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX

: FEMALE

Group Name Control 320 ppm 800 ppm 2000 ppm No. of Animals on Study 50 50 50 50 Grade (%) (%) (%) (%) (%) (%) (%) (%) (%) Organ_ Findings_ (Special sense organs/appendage) <50> <50> <50> eye 0 0 0 0 0 0 0 0 0 0 0 0 retinal atrophy (4)(0)(0)(0) (12) (0) (0) (0) (4)(0)(0)(0) (6)(0)(0)(0) keratitis 0 0 0 0 0 0 0 0 (2)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0) (0) (0) (0) Harder gl <50> <49> <50> <50> inflammatory infiltration 0 0 0 0 1 0 0 0 0 (0)(0)(0)(0) (0)(0)(2)(0) (0)(0)(0)(0) (0)(0)(0)(0) 19 lymphocytic infiltration 27 20 19 0 (54) (2) (0) (0) (41) (0) (0) (0) (38) (0) (0) (0) (38) (0) (0) (0) (Musculoskeletal system) ⟨50⟩ <50> <50> <50> bone osteosclerosis 0 0 2 0 0 0 0 1 0 0 (4)(0)(0)(0) (2)(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

b: Number of animals with lesion

(c)

c:b/a * 100

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

(IIPT150)

BAIS3

APPENDIX L 3

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY

RAT: MALE: DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

PAGE: 1

		f Animals on Study	Control Is on Study 10	320 ppm 6	800 ppm 12	2000 ppm 15
Organ	Grade Findings	<u>1</u> 2 (%) (%		1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
{Integumentar	y system/appandage)					
skin/app	hyperplasia:epidermis	0 0	<10>) 0 0)) (0) (0)	(6) 1 0 0 0 (17) (0) (0) (0)	<pre></pre>	<15> 0 0 0 0 0 (0) (0) (0) (0)
	scab	0 0	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)
{Respiratory	system)					
nasal cavit	thrombus	3 (<10> 0 0 0 0) (0) (0)	(6) 1 0 0 0 (17) (0) (0) (0)	3 0 0 0 (25) (0) (0) (0)	<pre></pre>
	mineralization		0 0 0	3 0 0 0 0 (50) (0) (0) (0)	5 0 0 0 (42) (0) (0) (0)	11 0 0 0 (73) (0) (0) (0)
	eosinophilic change:olfactory epithelium	2 ((20) ((0 0 0	0 0 0 0 0 (0) (0)	2 0 0 0 0 (17) (0) (0) (0)	8 0 0 0 (53) (0) (0) (0)
	inflammation:foreign body		0 0 0	0 0 1 0 (0) (17) (0)	3 0 0 0 (25) (0) (0) (0)	1 0 0 0 0 (7) (0) (0)
	inflammation:respiratory epithelium		0 0 0	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)

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

SEX

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

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

: MALE

DEAD AND MORIBUND ANIMALS (0-105W)

Group Name 320 ppm 800 ppm 2000 ppm Control 12 15 No. of Animals on Study 10 Grade 3 3 3 2 3 (%) (%) (%) (%) (%) (%) (%) (%) (%) (%) Findings_ Organ_ {Respiratory system} masal cavit <10> < 6> <12> <15> 0 0 1 0 0 0 0 0 0 0 0 respiratory metaplasia:olfactory epithelium 0 0 (0)(0)(0)(0) (0)(17)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) lung <10> < 6> <12> <15> 0 0 0 3 0 0 0 0 0 0 congestion 0 0 0 (10) (0) (0) (0) (50) (0) (0) (0) (33) (0) (0) (0) (27) (0) (0) (0) 0 0 hemorrhage 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) (7)(0)(0)(0) bronchopneumonia 0 0 1 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (7)(0)(0)(0) bronchiolar-alveolar cell hyperplasia 2 0 0 (0) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) (13) (0) (0) (0) {Hematopoietic system} bone marrow <10> < 6> <12> <15> 0 0 0 0 0 0 granulation 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (7)(0)(0)(0) 1 : Slight 2 : Moderate 3 : Marked Grade 4 : Severe a : Number of animals examined at the site < a > b b: Number of animals with lesion c:b/a*100 (c)

(HPT150)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE DEAD AND MORIBUND ANIMALS (0-105W)

800 ppm 2000 ppm 320 ppm Group Name Control 12 15 No. of Animals on Study 10 6 Grade (%) (%) (%) Findings_ {Hematopoietic system} <15> <10> < 6> <12> bone marrow 0 0 0 0 0 0 0 0 0 0 0 0 0 increased hematopoiesis (0)(0)(0)(0) (33) (0) (0) (0) (20) (0) (0) (0) (30) (0) (0) (0) <10> < 6> <12> <15> spleen 0 1 0 0 0 0 0 0 0 0 0 0 0 0 thrombus (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(7)(0) 0 0 0 0 1 2 0 0 * 2 3 0 deposit of hemosiderin (33) (13) (0) (0) (17) (33) (0) (0) (17) (25) (0) (0) (0)(0)(0)(0) 0 0 0 0 0 2 0 0 0 fibrosis 0 (0)(0)(0)(0) (0)(0)(13)(0) (0)(0)(10)(0) (0)(0)(0)(0) 0 0 1 1 4 0 0 0 extramedullary hematopoiesis (7)(0)(0)(0) (0)(10)(40)(0) (0) (0) (0) (0) (0)(8)(8)(0) {Circulatory system} <10> < 6> <15> heart 0 0 0 0 0 0 0 0 0 0 0 0 0 0 thrombus (0)(0)(0)(0) (0)(0)(0)(0) (10) (0) (0) (0) (17) (0) (0) (0) 2 : Moderate 3 : Marked 4 : Severe Grade 1 : Slight

(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

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

PAGE: 4

Organ		p Name	320 ppm 6 1 2 3 4 (%) (%) (%)	800 ppm 12 1 2 3 4 (%) (%) (%) (%)	2000 ppm 15 1 2 3 4 (%) (%) (%) (%)
{Circulatory	system)				
eart	myocardial fibrosis	3 0 0 0 (30) (0) (0) (0)	<pre></pre>	<pre></pre>	<15> 10 0 0 0 (67) (0) (0) (0)
Digestive s	ystem)	•			
ooth	inflammation	3 0 0 0 (30) (0) (0) (0)	<pre></pre>	<pre></pre>	<15> 0 0 0 0 0 0 0 0 0 0 0 0 0 0
tomach	ulcer:forestomach	2 1 0 0 (20) (10) (0) (0)	(0) (0) (0) (0)	0 1 0 0 (0) (8) (0) (0)	2 0 0 0 0 (13) (0) (0) (0)
	erosion:glandular stomach	1 0 0 0 (10) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
	squamous cell hyperplasia:forestomach	2 0 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0)	2 0 0 0 0 (13) (0) (0) (0)
iver	herniation	1 0 0 0 (10) (10) (10) (10) (10)	< 6> 1 0 0 0 (17) (0) (0) (0)	<12> 1 0 0 0 (8) (0) (0) (0)	3 0 0 0 (20) (0) (0) (0)

(HPT150)

BAIS3

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : MALE

.

Organ	Findings	Group Name Control No. of Animals on Study 10 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 6 1 2 3 4 (%) (%) (%) (%)	800 ppm 12 1 2 3 4 (%) (%) (%) (%)	2000 ppm 15 1 2 3 4 (%) (%) (%) (%)
(Digestive sy	rstem}				
liver	necrosis:central	<10> 0 0 0 0 0 0 0 0 0 0 0	6> 0 1 0 0 (0) (17) (0) (0)	(12> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>
	granulation	3 0 0 0 0 (30) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	4 0 0 0 (27) (0) (0) (0)
	clear cell focus	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
	basophilic cell focus	1 0 0 0 (10) (0) (0) (0)	0 0 0 0 0 (0)	2 0 0 0 (17) (0) (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
	spongiosis hepatis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (8) (0) (0)	1 0 0 0 (7) (0) (0) (0)
	bile duct hyperplasia	9 1 0 0 (90) (10) (0) (0)	4 1 0 0 (67) (17) (0) (0)	8 4 0 0 (67) (33) (0) (0)	10 3 0 0 (67) (20) (0) (0)
pancreas	atrophy	1 0 0 0 (10) (10) (10)	<pre></pre>	1 0 0 0 (8) (0) (0) (0)	1 0 0 0 (7) (0) (0) (0)
{Urinary sys	tem}				
kidney	chronic nephropathy	3 3 2 0 (30) (30) (20) (0)	(6) 0 1 1 0 (0) (17) (17) (0)	<12> 4 6 1 0 (33) (50) (8) (0)	3 2 7 1 (20) (13) (47) (7)

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : MALE

PAGE: 6

Organ	Findings	Group Name Control	320 ppm 6 1 2 3 4 (%) (%) (%) (%)	800 ppm 12 1 2 3 4 (%) (%) (%) (%)	2000 ppm 15 1 2 3 4 (%) (%) (%) (%)
Urinary sys	tem}				
idney	hydronephrosis	1 0 0 0 (10) (0) (0) (0)	<pre></pre>	<12> 0 0 0 0 (0) (0) (0) (0)	<15> 0 0 0 0 (0) (0) (0) (0)
	papillary necrosis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	3 0 0 0 (25) (0) (0) (0)	3 1 0 0 (20) (7) (0) (0)
	mineralization:papilla	0 0 0 0 0 (0) (0)	1 0 0 0 0 (17) (0) (0) (0)	2 0 0 0 0 (17) (0) (0) (0)	4 0 0 0 0 (27) (0) (0) (0)
	urothelial hyperplasia:pelvis	2 0 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	2 0 0 0 0 (17) (0) (0) (0)	7 0 0 0 (47) (0) (0) (0)
Endocrine s	system)				
ituitary	cyst	0 0 0 0 (0) (0) (0) (0)	<pre></pre>	1 0 0 0 (8) (0) (0) (0)	<15> 0 0 0 0 (0) (0) (0) (0)
	hyperplasia	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (8) (0) (0) (0)	4 0 0 0 0 (27) (0) (0) (0)
	Rathke pouch	1 0 0 0 (10) (0) (0) (0)	1 0 0 0 (17) (0) (0) (0)	0 0 0 0 0 (0) (0) (0)	0 0 0 0 0 (0) (0) (0)

(IIPT150)

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

BAIS3

SEX

(IIPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

: MALE

Organ	Findings	Group Name Control No. of Animals on Study 10 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 6 1 2 3 4 (%) (%) (%) (%)	800 ppm 12 1 2 3 4 (%) (%) (%) (%)	2000 ppm 15 1 2 3 4 (%) (%) (%) (%)
{Endocrine s	system)				
thyroid	C-cell hyperplasia	0 0 0 0 (0) (0) (0) (0)	<pre></pre>	0 0 0 0 (0) (0) (0) (0)	(15) 1 0 0 0 (7) (0) (0) (0)
adrenal	hyperplasia:cortical cell	<10> 2 0 0 0 (20) (0) (0) (0)	<pre></pre>	<12> 0 0 0 0 0 0 0 0 0 0 0 0	<15> 0 0 0 0 (0) (0) (0) (0)
	hyporplasia:modulla	0 0 0 0 0 (0) (0)	1 0 0 0 0 (17) (0) (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
{Reproductiv	ve system)				
testis	atrophy	<10> 7 0 0 0 (70) (0) (0) (0)	(6) 1 0 0 0 (17) (0) (0) (0)	9 0 0 0 (75) (0) (0) (0)	<15> 3 0 0 0 * (20) (0) (0) (0)
	interstitial cell hyperplasia	2 0 0 0 (20) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
prostate	inflammation	2 0 0 0 (20) (0) (0) (0)	(65) 1 0 0 0 (17) (0) (0) (0)	3 1 0 0 (25) (8) (0) (0)	4 0 0 0 (27) (0) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate a: Number of animals examined at the b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: 1				

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

0rga1i		Group Name Control No. of Animals on Study 10 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 6 1 2 3 4 (%) (%) (%) (%)	800 ppm 12 1 2 3 4 (%) (%) (%) (%)	2000 ppm 15 1 2 3 4 (%) (%) (%) (%)
{Reproductive	e system}				
prostate	hyperplasia	<10> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>	<12> 0 0 0 0 0 0 0 0 0 0 0 0	\(\langle 15 \rangle \) \(1 0 0 \\ (7) (0) (0) (0) \)
manmary gl	galactocele	2 0 0 0 (20) (0) (0) (0)	2 0 0 0 (33) (0) (0) (0)	1 0 0 0 (8) (0) (0) (0)	<15> 4 0 0 0 (27) (0) (0) (0)
{Nervous sys	tem}				
brain	hemorrhage	1 0 0 0 (10) (0) (0) (0)	(0) (0) (0) (0) (0) (0) (0) (0)	(12> 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 sen	se organs/appendage)				
eye	cataract	\(\lambda 10 \rangle \) 4	4 0 0 0 (67) (0) (0) (0)	4 0 0 0 (33) (0) (0) (0)	<15> 8 0 0 0 (53) (0) (0) (0)
	retinal atrophy	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)	2 0 0 0 0 (13) (0) (0) (0)
Grade <a>> b ca> significant	1: Slight 2: Moderate 3 a: Number of animals examined at the s b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤			,	

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

		Group Name Control No. of Animals on Study 10 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 6 1 2 3 4 (%) (%) (%) (%)	800 ppm 12 1 2 3 4 (%) (%) (%) (%)	2000 ppm 15 1 2 3 4 (%) (%) (%) (%)
brgan	Findings	(6) (6) (0)	(10) (10) (10)	(10) (10) (10)	
Special sens	e organs/appendage)				
эуе	keratitis	0 0 0 0 0 (0) (0) (0)	<pre></pre>	<12> 0 0 0 0 (0) (0) (0) (0)	1 0 0 0 (7) (0) (0) (0)
	iritis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (7) (0) (0) (0)
arder gl	lymphocytic infiltration	3 0 0 0 0	<pre></pre>	2 0 0 0 (17) (0) (0) (0)	<15> 0 0 0 0 (0) (0) (0) (0
{Body cavitie	s)				
peritoneum	peritonitis	<10> 0 0 0 0 0 0 0 0 0 0 0	<pre></pre>	<12> 0 0 0 0 0 0 0 0 0 0 0 0	<15> 0 0 0 0 (0) (0) (0) (0

(HPT150)

(c) c:b/a*100

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

BAIS3

APPENDIX L 4

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY

RAT: FEMALE: DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

: FEMALE

DEAD AND MORIBUND ANIMALS (0-105W)

SEX PAGE: 10 800 ppm 2000 ppm Group Name Control 320 ppm No. of Animals on Study 13 10 8 8 Organ__ Findings_ {Respiratory system} <13> <10> < 8> < 8> nasal cavit 0 0 0 0 0 0 thrombus 0 0 (38) (0) (0) (0) (8)(0)(0)(0) (30) (0) (0) (0) (25) (0) (0) (0) 0 2 mineralization (20) (0) (0) (0) (25) (0) (0) (0) (25) (0) (0) (0) (46) (0) (0) (0) 6 2 0 * eosinophilic change:olfactory epithelium 2 0 3 3 0 0 0 (38) (38) (0) (0) (25) (75) (0) (0) (38) (23) (0) (0) (60) (20) (0) (0) 0 0 0 0 0 0 0 0 0 0 0 0 0 inflammation:foreign body (0)(0)(0)(0) (0)(0)(0)(0) (13) (0) (0) (0) (0)(0)(0)(0) <10> < 8> <13> < 8> lung 0 0 0 0 0 0 0 0 0 0 0 congestion 0 (46) (0) (0) (0) (50) (0) (0) (0) (38) (0) (0) (0) (38) (0) (0) (0) 0 0 0 0 0 0 0 edema 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (13) (0) (0) (0) (0)(0)(0)(0) {Hematopoietic system} <13> <10> < 8> < 8> bone marrow 0 0 0 0 0 0 increased hematopoiesis 0 0 0 0 0 (0)(0)(0)(0) (13) (0) (0) (0) (15) (0) (0) (0) (0)(0)(0)(0) 2 : Moderate 3 : Marked 4 : Severe Grade 1 : Slight

(HPT150)

(a)

b

(c) c:b/a * 100 Significant difference; *: $P \le 0.05$ **: $P \le 0.01$ Test of Chi Square

a : Number of animals examined at the site

b: Number of animals with lesion

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE

PAGE: 11

Organ	Findings	Group Name Control No. of Animals on Study 13 Grade 1 2 3 4	320 ppm 10 1 2 3 4 (%) (%) (%) (%)	800 ppm 8 1 2 3 4 (%) (%) (%) (%)	2000 ppm 8 1 2 3 4 (%) (%) (%) (%)
{Hematopoie	tic system)				
spleen	deposit of hemosiderin	<13> 4 4 0 0 (31) (31) (0) (0)	<10> 0 6 1 0 (0) (60) (10) (0)	<pre></pre>	<pre></pre>
	extramedullary hematopoiesis	3 0 4 0 (23) (0) (31) (0)	0 0 2 0 (0) (20) (0)	0 1 0 0 (0) (13) (0) (0)	0 0 0 0 *
{Circulator	y system}				
heart	thrombus	<pre></pre>	0 0 0 0 (0) (0) (0) (0)	4 8> 1 0 0 0 (13) (0) (0) (0)	(0) (0) (0) (0) (0) (0) (0) (0)
	necrosis:focal	0 0 0 0 0 (0)	0 0 0 0 0 0 (0)	0 0 0 0 0 0 (0) (0)	1 0 0 0 0 (13) (0) (0) (0)
	mineralization	1 0 0 0 (8) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)
	inflammatory cell nest	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (13) (0) (0) (0)
	myocardial fibrosis	5 0 0 0 (38) (0) (0) (0)	5 0 0 0 (50) (0) (0) (0)	1 0 0 0 (13) (0) (0) (0)	3 0 0 0 (38) (0) (0) (0)

Grade < a > 1 : Slight

2 : Moderate

3 : Marked

4 : Severe

a : Number of animals examined at the site

b

b: Number of animals with lesion

(c)

c:b/a*100

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

SEX

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

: FEMALE

DEAD AND MORIBUND ANIMALS (0-105W)

800 ppm 2000 ppm Group Name Control 320 ppm No. of Animals on Study 13 10 8 8 3 Grade (%) (%) (%) Organ_ Findings_ (%) {Digestive system} <13> <10> < 8> < 8> tooth 0 0 0 0 0 0 0 0 0 0 inflammation (0)(0)(0)(0) (0)(0)(0)(0) (10) (0) (0) (0) (13) (0) (0) (0) <13> <10> < 8> stomach 0 0 0 0 1 0 0 1 1 1 0 0 1 ulcer: forestomach (0)(8)(0)(0) (10) (10) (0) (0) (13) (13) (13) (0) (0)(13)(0)(0) erosion:glandular stomach 0 0 0 0 (0)(0)(0)(0) (10) (0) (0) (0) (0)(0)(0)(0) (0)(0)(0)(0) 3 squamous cell hyperplasia: forestomach (8)(0)(0)(0) (30) (0) (0) (0) (38) (0) (0) (0) (38) (0) (0) (0) <10> < 8> < 8> <13> liver 0 0 0 0 0 0 0 0 0 0 hermiation (15) (0) (0) (0) (0)(0)(0)(0) (13) (0) (0) (0) (25) (0) (0) (0) 2 0 0 necrosis:central 0 (8)(0)(0)(0) (0)(0)(0)(0) (25) (0) (0) (0) (0)(0)(0)(0) fatty change:central 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (13) (0) (0) (0) (0)(0)(0)(0) 3 : Marked 1 : Slight 2 : Moderate 4 : Severe Grade < a > a: Number of animals examined at the site ь 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

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

Organ	1	Froup Name Control to of Animals on Study 13 arade 1 2 3 4 (%) (%) (%) (%)	320 ppm 10 1 2 3 4 (%) (%) (%) (%)	800 ppm 8 1 2 3 4 (%) (%) (%) (%)	2000 ppm 8 1 2 3 4 (%) (%) (%) (%)
{Digestive s	ystem)				
liver	granulation	\(\lambda 13 \) \(1 0 0 0 \) \((8) (0) (0) (0) \)	<10> 0 0 0 0 0 0 0 0 0 0 0 0 0 0	< 8> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>
	basophilic cell focus	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 (13) (0) (0) (0)
	bile duct hyperplasia	1 0 0 0 0 (8) (0) (0) (0)	1 0 0 0 0 (10) (10) (10)	1 0 0 0 (13) (0) (0) (0)	2 0 0 0 (25) (0) (0) (0)
ancreas	atrophy	1 0 0 0 (8) (0) (0) (0)	(10) 1 0 0 0 (10) (0) (0) (0)	<pre></pre>	2 0 0 0 (25) (0) (0) (0)
Urinary sys	stem}				
i dney	cyst	\(\langle 13> \) \(1 0 0 \\ (8) (0) (0) (0) \)	0 0 0 0 (0) (0) (0) (0)	<pre></pre>	(0)(0)(0)(0)
	chronic nephropathy	3 0 0 0 0 (23) (0) (0) (0)	2 0 2 0 (20) (20) (0)	1 1 1 0 (13) (13) (13) (0)	3 1 0 0 (38) (13) (0) (0)
Grade (a > b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤				

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

Organ	1	Froup Name Control No. of Animals on Study 13 Frade 1 2 3 4 (%) (%) (%) (%)	320 ppm 10 1 2 3 4 (%) (%) (%) (%)	800 ppm 8 1 2 3 4 (%) (%) (%) (%)	2000 ppm 8 1 2 3 4 (%) (%) (%) (%)
{Urinary sys	stem}				
kidney	papillary necrosis	<13> 0 0 0 0 0 (0) (0) (0) (0)	2 0 0 0 0 (20) (0) (0) (0)	<pre></pre>	<pre></pre>
	mineralization:papilla	0 0 0 0 0		0 0 0 0 0 (0) (0)	4 0 0 0 * (50) (0) (0)
	urothelial hyperplasia:pelvis	1 0 0 0		(13) (0) (0) (0)	4 0 0 0 0 (50) (0) (0)
{Endocrine s	system)				
pituitary	cyst	<13> 4 0 0 0 (31) (0) (0) (0		<pre></pre>	<pre></pre>
	hyperplasia	0 0 0 0 0		1 0 0 0 (13) (0) (0) (0)	1 0 0 0 (13) (0) (0) (0)
thyroid	C-cell hyperplasia	<13> 0 0 0 0 (0) (0) (0) (0		<pre></pre>	0 0 0 0 (0) (0) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; * : P ≤ 0.05 ** : P ≤				

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

PAGE: 15

Organ	Î	Group Name Control No. of Animals on Study 13 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 10 1 2 3 4 (%) (%) (%) (%)	800 ppm 8 1 2 3 4 (%) (%) (%)	2000 ppm 8 1 2 3 4 (%) (%) (%) (%)
{Endocrine sy	ystom}				
adrenal	peliosis-like lesion	3 0 0 0 (23) (0) (0) (0)	<10> 4 0 0 0 (40) (0) (0) (0)	2 0 0 0 (25) (0) (0) (0)	<pre></pre>
	hyperplasia:cortical cell	1 0 0 0 (8)(0)(0)(0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (13) (0) (0)	0 0 0 0 0 (0) (0)
	hyperplasia:medulla	1 0 0 0 (8) (0) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	i 0 0 0 (13) (0) (0) (0)
	focal fatty change:cortex	0 0 0 0 0 (0) (0)	0 0 0 0 0 0 (0) (0)	1 0 0 0 (13) (0) (0) (0)	1 0 0 0 0 0 (13) (13) (10) (10)
{Reproductiv	e system}				
uterus	cystic endometrial hyperplasia	(13> 0 0 0 0 (0)(0)(0)(0)	(10) 1 0 0 0 (10) (0) (0) (0)	<pre></pre>	<pre></pre>
mammary gl	galactocele	(13> 0 0 0 0 (0) (0) (0) (0)	2 0 0 0 (20) (0) (0) (0)	\(\langle 8 > \) 1	2 0 0 0 (25) (0) (0) (0)
Grade <a>> b (c) Significant	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 difference; * : P ≤ 0.05 ** : P ≤				

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE DEAD AND MORIBUND ANIMALS (0-105W)

2000 ppm 320 ppm 800 ppm Group Name Control No. of Animals on Study 13 10 8 8 Grade (%) (%) (%) Organ_ Findings {Nervous system} <13> <10> < 8> brain 0 1 0 0 0 0 0 0 0 gliosis (0)(0)(0)(0) (0)(10)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) {Special sense organs/appendage} <13> <10> < 8> eye 0 0 0 0 0 0 0 0 0 cataract (31) (0) (0) (0) (30) (0) (0) (0) (50) (0) (0) (0) (25) (0) (0) (0) retinal atrophy 0 0 0 0 1 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) keratitis 1 0 0 0 (8)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) < 8> < 9> < 8> Harder gl <13> inflammatory infiltration 0 0 0 0 1 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(11)(0) (0)(0)(0)(0) (0)(0)(0)(0) 2 0 lymphocytic infiltration 0 0 (23) (0) (0) (0) (0)(0)(0)(0) (25) (0) (0) (0) (25) (0) (0) (0) 1 : Slight 2 : Moderate 3 : Marked 4 : Severe Grade a: Number of animals examined at the site < a > b b: Number of animals with lesion (c) c:b/a*100

(HPT150)

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

BAIS3

ANIMAL

: RAT F344/DuCrj

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

REPORT TYPE : A1

SEX : FEMALE

PAGE: 17 2000 ppm Group Name Control 320 ppm 800 ppm 8 No. of Animals on Study 13 10 8 (%) (%) (%) (%) Findings_ (Musculoskeletal system) <10> < 8> < 8> <13> bone 0 0 0 0 0 0 0 0 0 0 0 0 0 osteosclerosis (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 ь 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)

BAIS3

APPENDIX L 5

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY

RAT: MALE: SACRIFICED ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

PAGE: 1 Group Name Control 320 ppm 800 ppm 2000 ppm No. of Animals on Study 40 37 44 35 Grade Findings_ (%) (%) Organ_ {Integumentary system/appandage} skin/app <40> <44> <37> <35> fibrosis 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) hyperplasia: epidermis 0 0 0 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (3)(0)(0)(0) scab 0 0 (3)(0)(0)(0) (7)(0)(0)(0) (8)(3)(0)(0) (3)(0)(0)(0) epidermal cyst 0 0 0 0 0 0 0 (5)(0)(0)(0) (5)(0)(0)(0) (0)(0)(0)(0) (3)(0)(0)(0) {Respiratory system} nasal cavit <40> **<44>** ⟨37⟩ thrombus 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 0 0 27 0 24 (80) (0) (0) (0) (61) (0) (0) (0) (65) (0) (0) (0) (57) (0) (0) (0) eosinophilic change olfactory epithelium 6 1 0 32 10 0 20 11 22 10 2 (65) (15) (3) (0) (73) (23) (0) (0) (54) (30) (0) (0) (63) (29) (6) (0) Grade 1 : Slight 2 : Moderate

< a >

3 : Marked

4 : Severe

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

: 0347 STUDY NO.

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 : MALE SEX

Group Name Control 320 ppm mgg 008 2000 ppm No. of Animals on Study 44 37 35 40 Grade 3 3 3 (%) (%) (%) (%) (%) (%) (%) (%) (%) (%) Organ__ Findings_ {Respiratory system} <37> <35> <40> nasal cavit <44> 0 0 2 inflammation:foreign body 0 0 10 1 0 1 0 (35) (0) (0) (0) (23) (2) (0) (0) (16) (0) (3) (0) (29) (6) (0) (0) inflammation:respiratory epithelium 0 0 2 (5)(0)(0)(0) (3)(0)(0)(0) (6)(0)(0)(0) (13) (0) (0) (0) inflammation:olfactory epithelium 0 0 0 0 0 0 0 (3)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) respiratory metaplasia:olfactory epithelium (8)(0)(0)(0) (2)(0)(0)(0) (3)(0)(0)(0) (0)(0)(0)(0) squamous cell metaplasia:respiratory epithelium 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) lung <40> **<44>** <37> <35> congestion 0 0 0 (0)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) (3)(0)(0)(0) hemorrhage 1 0 0 0 2 0 0 0 0 0 0 (5)(0)(0)(0) (3)(0)(0)(0) (0)(0)(0)(0) (0)(0)(0)(0) inflammatory infiltration 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; $*: P \le 0.05$ **: $P \le 0.01$ Test of Chi Square

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

PAGE: 3

Organ	Findings	Group Name No. of Animals on Stud Grade	y 1 (%)	Con 40 2 (%)	3 (%)	<u>4</u> (%)	1 (%)		320 44 2 (%)	ppm 3 (%)	<u>4</u> (%	<u> </u>	-	<u>1</u> (%)		00 pr 37 	;	<u>4</u> (%)		<u>1</u> (%)			3	4 (%)
, gan	THOMS		(/0/	107		(10)	(10)		.,,,,	(707	(/0	, 												
Respiratory s	system}																							
ung	foreign body granuloma	(1 3) (<40 0 0) (0	0 (0)	0 (0)		<44 0 0) (0	0			1 3) (0	37>		0 0)	(0	0		0 0) (0 (0)
	osseous metaplasia	. (2 5) (0	0 (0)	0 (0)	1 (2)		0 0) (0 0)	0			1 3) (0 0)	((0 0)	(1	0 (0)		0 0) (0 (0)
	accumulation of foamy cells	(1 3) (0	0 (0)	0 (0)	0 (0)	(0 0) (0 0)	0 (0)	(1 3) (0 0)	(())) (0 0)	(i 3)	0 (0)		0 0) (0 (0)
	bronchiolar-alvoolar cell hyperplasia		2 5) (2 5) (0 (0)	0 (0)	1 (2)		1 2) (0 0)	0		(1	4 1) (0 0)	(())) (0 0)	(2 6)	0 (0)	(0 0) (0 (0)
Hematopoietio	c system}																							
one marrow	atrophy:focal		3 8) (<40 0 0) (0	0 (0)	3 (7)		<44 0 0) (0	0		(2 5) (0	37>))) (0 0)	(1 3)	0		0 0) (0
	granulation	(1 3) (0	0 (0)	0 (0)	2 (5)		0 0) (0 0)	0			2 5) (0 0)))) (0 0)	(0	0		0 0) (0 (0)
	increased hematopoiesis	(:	4 10) (1 3) (0	0 (0)	3 (7)		0 0) (0 0)	0 (0			2 5) (0 0)))) (0	(2 6)	0 (0)		0	0

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

b (c)

b: Number of animals with lesion

c:b/a * 100

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

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

PAGE: 4

Organ	N	roup Name	320 ppm 44 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%) (%)
{Hematopoie	tic system)				
lymph node	lymphadenitis	<40> 2 0 0 0 (5) (0) (0) (0)	<44> 0 0 0 0 (0) (0) (0) (0)	<37> 0 0 0 0 (0) (0) (0) (0)	<pre></pre>
spleen	deposit of hemosiderin	32 0 0 0 (80) (0) (0) (0)	<44> 36 1 0 0 (82) (2) (0) (0)	37> 31 0 0 0 (84) (0) (0) (0)	<35> 22 0 0 0 (63) (0) (0) (0)
	fibrosis	1 1 0 0 (3) (3) (0) (0)	1 3 0 0 (2) (7) (0) (0)	3 1 0 0 (8) (3) (0) (0)	0 1 1 0 (0) (3) (3) (0)
	extramedullary hematopoiesis	5 1 1 0 (13) (3) (3) (0)	7 0 0 0 (16) (0) (0) (0)	4 0 1 0 (11) (0) (3) (0)	2 1 0 0 (6) (3) (0) (0)
{Circulator	y system}				
heart	fibrosis:focal	<40> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\(\langle 44 \rangle \) \(1 0 0 0 \) \(2) \((0) (0) (0) \)	2 0 0 0 (5) (0) (0) (0)	(35) 1 0 0 0 (3) (0) (0) (0)
	myocardial fibrosis	19 0 0 0 (48) (0) (0) (0)	22 0 0 0 0 (50) (50) (0) (0)	15 0 0 0 (41) (0) (0) (0)	15 0 0 0 (43) (0) (0) (0)
Grade <a> b (c) Significant	1: Slight 2: Moderate 3: a: Number of animals examined at the sit b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤				

(HPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

Organ		up Name	320 ppm 44 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%) (%)
{Circulatory	system)				
heart	arteritis	440> 1 0 0 0 (3) (0) (0) (0)	\(\langle 44 \rangle \) \(1 0 0 \\ (2) (0) (0) (0) \)	<37> 0 0 0 0 (0) (0) (0) (0)	<35> 0 0 0 0 (0) (0) (0) (0)
{Digestive s	ystem)				
touth	inflammation	6 0 0 0 (15) (0) (0) (0)	6 0 0 0 (14) (0) (0) (0)	<37> 4 0 0 0 (11) (0) (0) (0)	<35> 4 0 0 0 (11) (0) (0) (0)
stomach	ulcer:forestomach	<40> 0 0 0 0 0 0 0 0 0 0 0	<44> 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)	35> 1 0 0 0 (3) (0) (0) (0)
	erosion:glandular stomach	0 0 0 0 0 (0) (0)	(0) (0) (0) (0)	2 0 0 0 0 (5) (0) (0)	3 0 0 0 0
	squamous cell hyperplasia:forestomach	1 0 0 0 0 (3) (3) (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	3 0 0 0 0 (9) (0) (0)
liver	herniation	3 0 0 0 (8) (0) (0) (0)	5 0 0 0 (11) (0) (0) (0)	<37> 7 0 0 0 (19) (0) (0) (0)	<35> 2 0 0 0 (6) (0) (0) (0)
Grade (a) b (c) Significant	1: Slight 2: Moderate 3: Market 3: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 differenco; *: $P \le 0.05$ **: $P \le 0.05$	arked 4: Severe 01 Test of Chi Square			

(IIPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

PAGE: 6

Organ	Findings	Group Name Control No. of Animals on Study 40 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 44 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%)
{Digestive	system)				
liver	granulation	\(\langle 40 > \) \(19 \) 0 \(0 \) 0 \(08 \) (\(0) \) (\(0) \(0 \) \(0 \)	(44) 14 3 0 0 (32) (7) (0) (0)	37> 14 0 0 0 (38) (0) (0) (0)	<35> 11 1 0 0 (31) (3) (0) (0)
	clear cell focus	3 0 0 0 0	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0) (0)	3 0 1 0 (9) (0) (3) (0)
	acidophilic cell focus	(3) (0) (0) (0)	5 0 0 0 (11) (0) (0) (0)	4 0 0 0 0 (11) (0) (0) (0)	5 2 0 0 * (14) (6) (0) (0)
	basophilic cell focus	8 0 0 0 (20) (0) (0) (0)	8 0 0 0 (18) (0) (0) (0)	13 7 0 0 ** (35) (19) (0) (0)	15 7 0 0 ** (43) (20) (0) (0)
	bile duct hyperplasia	34 6 0 0 (85) (15) (0) (0)	38 6 0 0 (86) (14) (0) (0)	29 8 0 0 (78) (22) (0) (0)	29 6 0 0 (83) (17) (0) (0)
	cholangiofibrosis	0 0 0 0 0 (0) (0)	0 0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0)
pancreas	atrophy	40> 6 0 0 0 (15) (0) (0) (0)	(44) 13 1 0 0 (30) (2) (0) (0)	(37) 12	<35> 4 0 0 0 (11) (0) (0) (0)
	islet cell hyperplasia	. 5 0 0 0 (13) (0) (0) (0)	3 0 0 0 0 (7) (0) (0)	1 0 0 0 0 (3) (0) (0)	1 0 0 0 0 (3) (0) (0) (0)
Grade <a>a> b (c) Significant	1: Slight 2: Moderate a: Number of animals examined at b: Number of animals with lesion c: b / a * 100 t difference; *: P ≤ 0.05 ***	3: Marked 4: Severe tho site : P ≤ 0.01 Test of Chi Square			

(HPT150)

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : MALE

Organ	Findings	Group Name Control	320 ppm 44 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%) (%)
{Urinary syst	cem}				
kidney	infarct	(40> i 0 0 0 (3) (0) (0) (0)	(44) 1 0 0 0 (2) (0) (0) (0)	37> 0 1 0 0 (0) (3) (0) (0)	35> 1 0 0 0 (3) (0) (0) (0)
	chronic nephropathy	7 22 11 0 (18) (55) (28) (0)	3 12 27 2 ** (7) (27) (61) (5)	0 9 25 3 ** (0) (24) (68) (8)	0 5 29 1 ** (0) (14) (83) (3)
	papillary necrosis	1 0 0 0 0 (3) (0) (0) (0)	12 0 0 0 ** (27) (0) (0) (0)	11 1 0 0 ** (30) (3) (0) (0)	17 3 0 0 *** (49) (9) (0) (0)
	mineralization:papilla	3 0 0 0 . (8) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	9 0 0 0 0 (24) (0) (0) (0)	15 0 0 0 *** (43) (0) (0) (0)
	dilatation:tubular lumen	1 0 0 0 0 (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)
	urothelial hyperplasia:pelvis	14 0 0 0 (35) (0) (0) (0)	18 0 0 0 (41) (0) (0) (0)	23 0 0 0 * (62) (0) (0) (0)	18 1 0 0 (51) (3) (0) (0)
urin bladd	transitional cell hyperplasia	(40) 0 0 0 0 (0) (0) (0) (0)	<44> 0 0 0 0 0 0 0 0 0 0 0	<37> 0 0 0 0 0 (0) (0) (0) (0)	(35) 1 0 0 0 (3) (0) (0) (0)
{Endocrine sy	vstem)				
pituitary	cyst	<40> 2 0 0 0 (5) (0) (0) (0)	5 0 0 0 (12) (0) (0) (0)	<37> 4 0 0 0 (11) (0) (0) (0)	(35) 1 1 0 0 (3) (3) (0) (0)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 SEX : MALE

PAGE: 8

Organ	Findings	Group Name Control No. of Animals on Study 40 Grade 1 2 3 (%) (%)	320 ppm 44 (%) 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%) (%)
(Endocrine s	ystem)				
ituitary	hyperplasia	<40> 12 0 0 (30) (0) (0) (0 16 0 0 0 0) (37) (0) (0) (0)	37> 13 0 0 0 (35) (0) (0) (0)	35> 7 0 0 0 (20) (0) (0) (0)
	Rathke pouch	3 0 0 (8) (0) (0) (0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 (5) (0) (0)	3 0 0 0 0 (9) (0) (0)
	aberrant craniopharyngeal tissue	1 0 0 (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 0 0 0 0 (0) (0)
nyroid	ultimibranchial body remanet	<40> 0 0 0 (0) (0) (0) (0 1 0 0 0 0) (2) (0) (0) (0)	37> 1 0 0 0 (3) (0) (0) (0)	35> 0 0 0 0 0 0 0 0
	C-cell hyperplasia	4 0 0 (10) (0) (0) (0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 0 0 0 0 (8) (0) (0)	3 1 0 0 (9) (3) (0) (0)
lrenal	hyperplasia:cortical coll	<40> 4 0 0 (10) (0) (0) (0 4 0 0 0 0) (9) (0) (0) (0)	<pre></pre>	<35> 1 0 0 0 (3) (0) (0) (0)
	hyperplasia:medulla	4 0 0 (10) (0) (0) (0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 0 0 0 0 (11) (0) (0) (0)	3 0 0 0 0

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

(HPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

Organ	Findings	Group Name Control No. of Animals on Study 40 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 44 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%) (%)
{Endocrine sy	ystem)				
adrena1	focal fatty change:cortex	(40) 0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	37> 1 0 0 0 (3) (0) (0) (0)	<pre></pre>
{Reproductive	e system)				
testis	atrophy	34 0 0 0 (85) (0) (0) (0)	39 0 0 0 (89) (0) (0) (0)	<37> 32 0 0 0 (86) (0) (0) (0)	<pre></pre>
	arteritis	1 0 0 0 (3) (0) (0) (0)	3 0 0 0 (7) (0) (0) (0)	1 0 0 0 0 (3) (0) (0)	1 0 0 0 (3) (0) (0) (0)
	interstitial cell hyperplasia	3 0 0 0 0 (8) (0) (0) (0)	4 0 0 0 0 (9) (0) (0)	2 0 0 0 0 (5) (0) (0) (0)	0 0 0 0 0 (0) (0)
epididymis	arteritis	<40> 0 0 0 0 (0) (0) (0) (0)	<44> 1 0 0 0 (2) (0) (0) (0)	<37> 0 0 0 0 (0) (0) (0) (0)	<35> 0 0 0 0 0 0 0 0 0 0 0 0
prostate	inflammation	<40> 8 0 0 0 (20) (0) (0) (0)	<44> 15 0 0 0 (34) (0) (0) (0)	<37> 2 0 0 0 (5) (0) (0) (0)	<pre></pre>
Grade <a>> b <ca>) ca> significant</ca>	1: Slight 2: Moderate a: Number of animals examined at the b: Number of animals with lesion c: b/a*100 difference; *: P ≤ 0.05 **: P				

(IIPT150)

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : MALE

Organ	No	oup Name	320 ppm 44 1 2 3 4 (%) (%) (%) (%)	800 ppm 37 1 2 3 4 (%) (%) (%) (%)	2000 ppm 35 1 2 3 4 (%) (%) (%) (%)
{Reproductive	systom)				
prostate	hyperplasia	<pre></pre>	9 0 0 0 (20) (0) (0) (0)	<pre></pre>	35> 8 0 0 0 (23) (0) (0) (0)
mammary gl	duct ectasia	<40> 0 0 0 0 0 0 0 0 0 0 0	(44) 1 0 0 0 (2) (0) (0) (0)	<37> 0 0 0 0 0 0 0 0 0 0 0	. <35> 1 0 0 0 (3) (0) (0) (0)
	galactocolo	4 0 0 0 0 (10) (10) (10) (10)	4 0 0 0 0 (9) (0) (0)	4 0 0 0 0 (11) (0) (0) (0)	4 0 0 0 0 (11) (0) (0) (0)
{Special sens	se organs/appendage)				
eye	cataract	5 0 0 0 (13) (0) (0) (0)	8 0 0 0 (18) (0) (0) (0)	4 0 0 0 (11) (0) (0) (0)	35> 4 0 0 0 (11) (0) (0) (0)
	retinal atrophy	3 0 0 0 0 (8) (0) (0) (0)	6 0 0 0 (14) (0) (0) (0)	5 0 0 0 (14) (0) (0) (0)	3 0 0 0 0 (9) (0) (0)
	mineralization:cornea	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 0 (0) (0)
Grade <a>> b (c) Significant d	 a: Number of animals examined at the site b: Number of animals with lesion c: b/a * 100 		·		

(HPT150)

BAIS3

ANIMAL

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

REPORT TYPE : A1

SEX : MALE SACRIFICED ANIMALS (105W)

PAGE: 11 800 ppm 2000 ppm 320 ppm Group Name Control No. of Animals on Study 37 35 40 44 Grade 3 (%) (%) (%) (%) (%) (%) (%) (%) Findings_ (Special sense organs/appendage) <44> ⟨37⟩ Harder gl <40> lymphocytic infiltration 0 0 0 11 1 0 0 11 0 0 0 (30) (0) (0) (0) (25) (2) (0) (0) (30) (0) (0) (0) (34) (0) (0) (0) <40> <44> Zymbal gl 0 0 0 0 0 0 0 0 1 0 0 0 0 0 inflammation (0)(0)(0)(0) (0)(0)(2)(0) (0)(0)(0)(0) (0)(0)(0)(0) Grade 1 : Slight 2 : Modorate 3 : Marked 4 : Severe < a > a: Number of animals examined at the site b: Number of animals with lesion b c:b/a * 100 (c) Significant difference; $*: P \le 0.05$ **: $P \le 0.01$ Test of Chi Square (HPT150)

APPENDIX L 6

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY

RAT: FEMALE: SACRIFICED ANIMALS

(2-YEAR STUDY)

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

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1

SEX : FEMALE

Organ	Group Name No. of Anim Grade Findings	Control als on Study 37 1 2 3 4 (%) (%) (%) (%)	320 ppm 40 1 2 3 4 (%) (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
Respiratory	system}				
asal cavit	thrombus	<37> 0 0 0 0 (0) (0) (0) (0)	(40) 0 0 0 0 (0) (0) (0) (0)	42> 1 0 0 0 (2) (0) (0) (0)	<42> 0 0 0 0 (0) (0) (0) (0)
	mineralization	13 0 0 0 (35) (0) (0) (0)	16 0 0 0 (40) (0) (0) (0)	18 0 0 0 (43) (0) (0) (0)	21 0 0 0 (50) (0) (0) (0)
	eosinophilic change:olfactory epithelium	14 19 3 0 (38) (51) (8) (0)	17 22 1 0 (43) (55) (3) (0)	17 24 0 0 (40) (57) (0) (0)	16 24 1 0 (38) (57) (2) (0)
	inflammation:foreign body	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0)	2 0 0 0 0 (5) (0) (0) (0)	0 0 0 0 0
	inflammation:respiratory epithelium	1 0 0 0 0 (3) (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)	1 0 0 0 0 (2) (0) (0)
	squamous cell metaplasia:respiratory epithelium	1 0 0 0 0 (3) (0) (0)	0 0 0 0 0 0 (0)	0 0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0)
ung	hemorrhage	<37> 0 0 0 0 (0) (0) (0) (0)	<40> 1 0 0 0 (3) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0	<42> 0 0 0 0 0 0 0 0 0 0 0
	osseous metaplasia	1 0 0 0 (3) (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)

b

b : Number of animals with lesion

c:b/a * 100 (c)

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

(HPT150)

BAIS3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1 -SEX : FEMALE

		Group Name No. of Animals on Study	Сол [.] 37				4					800 1 42			٠		42		
)rgan	Findings	Grade <u>1</u> (%)	2 (%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%		3 (%)	(%)	<u>_1</u> (%	5)	2 (%)	3 (%)	(%)
-																			
Respiratory	system}																		
ung	accumulation of foamy cells	0 (0)	<37: 0 (0) (0	0 0)	0 (0)	(4 0 (0)	0> (0) (0 0)	2 (5)	(0 0) (0 (0)	1 (2		<42 0 0) (0	0 (0)
	bronchiolar-alveolar cell hyperplasia	3 (8)	1 (3) (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)
Hematopoieti	c system)																		
one marrow	atrophy:focal	5 (14)	<37. 1 (3) (0	0 (0)	14 (35)	1	0> (0) (0 0)	11 (26)		<42>))) (0	0 (0)	(19		<42 2 5) (0 (0)	0 (0)
	granulation	2 (5)	0 (0) (0	0 (0)	4 (10)	0 (0)	0 (0) (0 0)	2 (5)	(())) (0	0 (0)	3 (7		0	0 (0)	0 (0)
	increased hematopoiesis	0 (0)	0 (0) (0	0 (0)	3 (8)	0 (0)	0 (0) (0 0)	3 (7)	(() ()	0	0 (0)	(2		0	0 (0)	0 (0)
ymph node	lymphadenitis	1 (3)	<37 0 (0) (0	0 (0)	0 (0)	0	0 (0) (0	1 (2)	(<42>))) (0	0 (0)		2) (<42 0 0) (0	0 (0)
Grade (a > b (c) Significant d	1: Slight 2: Moderate 3 a: Number of animals examined at the s. b: Number of animals with lesion c: b / a * 100 lifference; *: P ≤ 0.05 **: P ≤																		

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

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

Organ	N	Froup Name Control No. of Animals on Study 37 Frade 1 2 3 4 (%) (%) (%) (%)	320 ppm 40 1 2 3 4 (%) (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
{Hematopoie	tic system}				
spleen	deposit of hemosiderin	<37> 11 22 0 0 (30) (59) (0) (0)	<pre></pre>	\(\langle 42 \rangle \) 10 24 0 0 (24) (57) (0) (0)	<pre></pre>
	fibrosis	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	extramedullary hematopoiesis	4 I 0 0 (11) (3) (0) (0)	5 0 0 0 (13) (0) (0) (0)	4 3 2 0 (10) (7) (5) (0)	7 1 0 0 (17) (2) (0) (0)
(Circulator	y system)				
ocart	thrombus	<37> 1 0 0 0 (3) (0) (0) (0)	(40) 0 0 0 0 (0) (0) (0) (0)	<12> 0 0 0 0 (0) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0 0
	fibrosis:focal	0 0 0 0 0 (0)	2 0 0 0 0 (5) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	myocardial fibrosis	17 0 0 0 (46) (0) (0) (0)	25 0 0 0 (63) (0) (0) (0)	22 0 0 0 (52) (0) (0) (0)	20 0 0 0 (48) (0) (0) (0)
(Digestive	system)				
tooth	inflammation	\(\langle 37 \rangle \) \(0 0 0 0 \\ (0 (0 (0) (0) \)	<40> 1 0 0 0 (3) (0) (0) (0)	(42> 1 0 0 0 (2) (0) (0) (0)	(42) 0 0 0 0 (0) (0) (0) (0)
Grade (a > b (c)	1: Slight 2: Moderate 3 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 c: difference; * : P ≤ 0.05 ** : P ≤				

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

PAGE: 15

)rgan	No	roup Name Control . of Animals on Study 37 rade 1 2 3 4 (%) (%) (%) (%)	320 ppm 40 1 2 3 4 (%) (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
Digestive s	system)				
ongue	squamous cell hyperplasia	37> 1 0 0 0 (3) (0) (0) (0)	<pre></pre>	1 0 0 0 0 (2) (0) (0) (0)	<pre></pre>
tomach	basal cell hyperplasia	37> 0 0 0 0 0 0 0 0	<40> 0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	3 0 0 0 (7) (0) (0) (0)
	orosion:glandular stomach	0 0 0 0 0 (0) (0)	1 0 0 0 0 (3) (0) (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
	squamous cell hyperplasia:forestomach	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
iver	herniation	<37> 6 0 0 0 (16) (0) (0) (0)	6 0 0 0 (15) (0) (0) (0)	<42> 7 0 0 0 (17) (0) (0) (0)	<42> 9 0 0 0 (21) (0) (0) (0)
	granulation	22 8 0 0 (59) (22) (0) (0)	20 4 1 0 (50) (10) (3) (0)	16 4 0 0 *** (38) (10) (0) (0)	23 2 1 0 * (55) (5) (2) (0)
	acidophilic cell focus	1 0 0 0 0 (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)
rade a > b c) ignificant	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b / a * 100 difference; *: P ≤ 0.05 **: P ≤ 0				

(HPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

(HPT150)

SEX : FEMALE

PAGE: 16

	No Gr	oup Name Control . of Animals on Study 37 ade 1 2 3 4 (%) (%) (%) (%)	320 ppm 40 1 2 3 4 (%) (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
rgalı	Findings	(%) (%) (%) (%)	(%) (%) (%) (%)	(%) (%) (%)	(%) (%) (%)
Digestive s	system}				
iver	basophilic cell focus	3 1 0 0 (8) (3) (0) (0)	3 1 0 0 (8) (3) (0) (0)	4 0 1 0 (10) (0) (2) (0)	5 0 0 0 (12) (0) (0) (0)
	bile duct hyperplasia	7 1 0 0 (19) (3) (0) (0)	9 0 0 0 0 (23) (0) (0) (0)	9 1 0 0 (21) (2) (0) (0)	10 0 0 0 (24) (0) (0) (0)
	cholangiofibrosis	1 0 0 0 0 (3) (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)
pancreas	atrophy	2 0 0 0 (5) (0) (0) (0)	2 0 0 0 (5) (0) (0) (0)	1 0 0 0 (2) (0) (0) (0)	2 0 0 0 (5) (0) (0) (0)
	islet cell hyperplasia	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	. (2) (0) (0) (0)	0 0 0 0 0
{Urinary sys	stem}				
kidney	infarct	<37> 0 0 0 0 (0) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<pre></pre>
Grade <a> b (c)	1: Slight 2: Moderate 3: a: Number of animals examined at the sit b: Number of animals with lesion c: b / a * 100 difference: *: P ≤ 0.05 **: P ≤				

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

PAGE: 17

Organ	Group Name No. of Animal Grade	Control 37 1 2 3 4 (%) (%) (%) (%)	320 ppm 40 1 2 3 4 (%) (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
{Urimary syst	tem)				
kidney	chronic nephropathy	37> 12 2 2 0 (32) (5) (5) (0)	<40> 16 6 5 0 (40) (15) (13) (0)	<pre></pre>	<pre></pre>
	hydronephrosis	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)
	papillary necrosis	0 0 0 0 0 (0) (0)	5 0 0 0 (13) (0) (0) (0)	22 0 0 0 *** (52) (0) (0) (0)	7 15 1 0 ** (17) (36) (2) (0)
	mineralization:papilla	3 0 0 0 0 (8) (0) (0)	2 0 0 0 (5) (0) (0) (0)	6 1 0 0 (14) (2) (0) (0)	18 1 0 0 *** (43) (2) (0) (0)
	urothelial hyperplasia:pelvis	8 0 0 0 (22) (0) (0) (0)	8 0 0 0 (20) (0) (0) (0)	8 0 0 0 0 (19) (0) (0) (0)	23 0 0 0 ** (55) (0) (0) (0)
urin bladd	transitional cell hyperplasia	<37> 0 0 0 0 (0) (0) (0) (0)	<40> 0 0 0 0 0 0 0 0 0 0 0 0 0	<42> 2 0 0 0 (5) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0 0
	nodular hyperplasia:transitional epithelium	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
{Endocrine s	system)				
pituitary	cyst	37> 8 0 0 0 (22) (0) (0) (0)	<40> 14 1 0 0 (35) (3) (0) (0)	(42) 14 2 0 0 (33) (5) (0) (0)	(41) 19 2 0 0 * (46) (5) (0) (0)
Grade (a > b (c)	1: Slight 2: Moderate 3: Marked a: Number of animals examined at the site b: Number of animals with lesion c: b/a*100	4 : Severe			

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

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

		oup Name . of Animals on Study	Cor 37	ntrol 7				0 ppi 10	m				800 42) ppm)O pp 12	m	
Organ		ade <u>1</u> (%)	2 (%)	3 (%)	(%)	<u>1</u> (%)	(%)	(%)		<u>4</u> (%)	<u>1</u> (%)	2 (%)	3 (%)	<u>4</u> (%)	<u>1</u> (%	5)	(%)	3 (%		(%)
{Endocrine s	system}																				
pituitary	hyperplasia	8 (22)	(37 (0)	0	0 (0)	16 (40)	0	10> 0 (0)		0 0)	12 (29		<45 0 0)	2> 0 (0)	0 (0)	10 (24		0	11> 0 (0		0 0)
	Rathke pouch	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	(0)) (0 0)	2 (5	·) (0	0 (0)	0 (0)	((0	0 (0		0 0)
thyroid	ultimibranchial body remanet	0 (0)	(3° (0)	0	0 (0)	0 (0)	0	10> 0 (0		0 0)	0 (0		(4) 0 0)	2> 0 (0)	0 (0)		l 2) (0	12> 0 (0		0
	C-cell hyperplasia	6 (16)	0 (0)	0 (0)	0 (0)	4 (10)	0 (0)	0 (0) (0 0)	4 (10		0 0)	0 (0)	0 (0)		3	0	0 (0 0)
drena1	peliosis-like lesion	27 (75)	(3) (0)	0	0 (0)	22 (55)	0			0	23 (55		<4 0 0)	2> 0 (0)	0 (0)	20 (48		0	42> C		0 :
	hyperplasia:cortical cell	8 (22)	0 (0)	0 (0)	0 (0)	4 (10)	0 (0)	0) (0 0)	4 (10	i) (0	0 (0)	0 (0)	(1	3 7) (1 2)	(0		0 0)
	hyperplasia:medulla	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)
Grade (a) b	1: Slight 2: Moderate 3: a: Number of animals examined at the site b: Number of animals with lesion c: b/a*100	Marked 4: Sever)																		

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS (SUMMARY)

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

: FEMALE

PAGE: 19

Organ	Findings	Group Name No. of Animals on Study Grade 1 (%)	Control 37 2 3 4 (%) (%) (%	320 ppm 40 1 2 3 4 (%) (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
{Endocrine :	systom)					
adrena1	focal fatty change:cortex	0 (0) (<36> 0 0 ((0) (0) ((<pre></pre>	3 0 0 0 (7) (0) (0) (0)	3 0 0 0 (7) (0) (0) (0)
Reproducti	ve system)					
ovary	cyst	0 (0) (<37> 0 0 0 (0) (0) (0)	\(\langle 40 \rangle \) \(1 0 0 0 \) \(3 \rangle (0) (0) (0) \)	<pre></pre>	42> 1 0 0 0 (2) (0) (0) (0)
terus	dilatation	1 (3) (<37> 0 0 ((0) (0) (0	(40) 1 0 0 0 (3) (0) (0) (0)	0 0 0 0 (0) (0) (0) (0)	<pre></pre>
	decidual 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)
	hyperplasia:epithelium	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)
	cystic endometrial hyperplasia	0 (0)	0 0 (3 0 0 0 0 (7) (0) (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
rade a > b c)	1: Slight 2: Moderate a: Number of animals examined at the b: Number of animals with lesion c: b/a*100 difference; *: P ≤ 0.05 **: P					

(HPT150)

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)

PAGE: 20

BAIS3

SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

(HPT150)

SEX : FEMALE

DHORIT TODD THILMHIDD (1004)

Organ	1	Froup Name Control No. of Animals on Study 37 Grade 1 2 3 4 (%) (%) (%) (%)	320 ppm 40 1 2 3 4 (%) (%) (%)	800 ppm 42 1 2 3 4 (%) (%) (%) (%)	2000 ppm 42 1 2 3 4 (%) (%) (%) (%)
Reproductive	e system)				
/agina	edema	<37> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<40> 0 0 0 0 (0) (0) (0) (0)	<42> 0 0 0 0 0 0 0 0 0 0 0 0	<42> 0 1 0 0 (0) (2) (0) (0)
nammary gl	galactocele	37> 1 0 0 0 (3) (0) (0) (0)	<40> 2 0 0 0 (5) (0) (0) (0)	<42> 6 0 0 0 (14) (0) (0) (0)	<42> 0 0 0 0 (0) (0) (0) (0)
{Nervous sys	tem)				
orain	hemorrhage	37> 1 0 0 0 (3) (0) (0) (0)	<40> 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 (0) (0) (0) (0)	<pre></pre>
	gliosis	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	0 0 0 0 0 (0) (0)	1 0 0 0 0 (2) (0) (0) (0)
{Special sen	ise organs/appendage)				
э уе	cataract	37> 1 0 0 0 (3) (0) (0) (0)	<pre></pre>	42> 1 0 0 0 (2) (0) (0) (0)	4 0 0 0 (10) (0) (0) (0)
Grade <a>> b (c) Significant	 a: Number of animals examined at the si b: Number of animals with lesion c: b / a * 100 	: Marked 4 : Severe te 0.01 Test of Chi Square			

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

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

		Animals on Study 37	320 ppm 40	800 ppm 42	2000 ppm 42
rgan	Grade Findings	<u>1 2 3 4</u> (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)	1 2 3 4 (%) (%) (%) (%)
pecial sem	ise organs/appendage)				
re	retinal atrophy	<37> 2 0 0 0 (5) (0) (0) (0)	5 0 0 0 (13) (0) (0) (0)	2 0 0 0 (5) (0) (0) (0)	3 0 0 0 (7) (0) (0) (0)
rder gl	lymphocytic infiltration	<37> 24 1 0 0 (65) (3) (0) (0)	20 0 0 0 (50) (0) (0) (0)	<42> 17 0 0 0 * (40) (0) (0) (0)	<42> 17 0 0 0 0 (40) (40) (0) (0)
usculoskel	etal system)				
lte	osteosclerosis	37> 1 0 0 0 (3) (0) (0) (0)	<pre></pre>	2 0 0 0 (5) (0) (0) (0)	1 0 0 0 (2) (0) (0) (0)
rade a > b c)	1: Slight 2: Moderate 3: Marke a: Number of animals examined at the site b: Number of animals with lesion c: b/a*100 difference; *: P ≤ 0.05 **: P ≤ 0.01	d 4: Severe Test of Chi Square			

APPENDIX M 1

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

RAT: MALE

(2-YEAR STUDY)

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

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE

: MALE

Time-related Weeks	Items	Group Name	Control	320 ppm	800 ppm	2000 ррш	
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	1	
	NO. OF ANIMALS WITH TUMORS		0	0	0	0	
	NO. OF ANIMALS WITH SINGLE TUMORS		ō	0	Ŏ	Ō	
	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		1	3	3	4	
	NO. OF ANIMALS WITH TUMORS		1	1	2	4	
	NO. OF ANIMALS WITH SINGLE TUMORS		1	1	2	4	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0	
	NO. OF BENIGN TUMORS		0	0	0	1	
	NO. OF MALIGNANT TUMORS		1	1	2	3	
	NO. OF TOTAL TUMORS		1	1	2	4	
79 - 104	NO. OF EXAMINED ANIMALS		9	3	9	10	
	NO. OF ANIMALS WITH TUMORS		9	3	9	10	
	NO. OF ANIMALS WITH SINGLE TUMORS		2	1	2	4	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		7	2	7	6	
	NO. OF BENIGN TUMORS		9	5	13	16	
	NO. OF MALIGNANT TUMORS		7	1	9	3	
	NO. OF TOTAL TUMORS		16	6	22	19	
105 - 105	NO. OF EXAMINED ANIMALS		40	44	37	35	
	NO. OF ANIMALS WITH TUMORS		39	42	36	34	
	NO. OF ANIMALS WITH SINGLE TUMORS		16	10	15	6	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		23	32	21	28	
	NO. OF BENIGN TUMORS		71	88	64	71	
	NO. OF MALIGNANT TUMORS NO. OF TOTAL TUMORS		6	10	9	8	
	NO. OL IOINE IOMONS		77	98	73	79	

(HPT070)

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

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE

PAGE: 2

Time-related Weeks	Items	Group Name	Control	320 ppm	800 ppm	2000 ppm	
0 - 105	NO. OF EXAMINED ANIMALS		50	50	49	50	
	NO. OF ANIMALS WITH TUMORS		49	46	47	48	
	NO. OF ANIMALS WITH SINGLE TUMORS		19	12	19	14	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		30	34	28	34	
	NO. OF BENIGN TUMORS		80	93	77	88	
	NO. OF MALIGNANT TUMORS		14	12	20	14	
	NO. OF TOTAL TUMORS		94	105	97	102	
	NO. OF TOTAL TOMORS		94	105	91	102	

(HPT070)

APPENDIX M 2

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

RAT: FEMALE

(2-YEAR STUDY)

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

STUDY NO. : 0347

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE

ime-related Weeks	Items	Group Name	Control	320 ppm	800 pm	2000 ppm	
0 - 52	NO. OF EXAMINED ANIMALS		1	0	1	0	
	NO. OF ANIMALS WITH TUMORS		1	0	0	0	
	NO. OF ANIMALS WITH SINGLE TUMORS		I	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		1	0	0	0	
	NO. OF TOTAL TUMORS		1	0	0	0	
53 - 78	NO. OF EXAMINED ANIMALS		2	2	1	0	
	NO. OF ANIMALS WITH TUMORS		2	1	0	0	
	NO. OF ANIMALS WITH SINGLE TUMORS		2	1	0	0	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0	
	NO. OF BENIGN TUMORS		2	1	0	0	
	NO. OF MALIGNANT TUMORS		0	0	0	0	
	NO. OF TOTAL TUMORS		2	1	0	0	
79 - 104	NO. OF EXAMINED ANIMALS		10	8	6	8	
	NO. OF ANIMALS WITH TUMORS		9	8	6	7	
	NO. OF ANIMALS WITH SINGLE TUMORS		7	5	3	5	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		2	3	3	2	
	NO. OF BENIGN TUMORS		6	7	3	4	
	NO. OF MALIGNANT TUMORS		5	4	6	5	
	NO. OF TOTAL TUMORS		11	11	9	9	
105 - 105	NO. OF EXAMINED ANIMALS		37	40	42	42	
	NO. OF ANIMALS WITH TUMORS		27	26	32	29	
	NO. OF ANIMALS WITH SINGLE TUMORS		15	17	18	21	
	NO. OF ANIMALS WITH MULTIPLE TUMORS		12	9	14	8	
	NO. OF BENIGN TUMORS		33	33	43	40	
	NO. OF MALIGNANT TUMORS		8	6	9	4	
	NO. OF TOTAL TUMORS		41	39	52	44	

STUDY NO. : 0347 NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : FEMALE

SEX : FEMALE PAGE : 4

Items	Group Name	Control	320 ррт	mqq 008	2000 ppm	
NO OF EXAMINED ANIMALS		50	50	50	50	
				* *		
		25	23	21	26	
NO. OF ANIMALS WITH MULTIPLE TUMORS		14	12	17	10	
NO. OF BENIGN TUMORS		41	41	46	44	
NO. OF MALIGNANT TUMORS		14	10	15	9	
NO. OF TOTAL TUMORS		55	51	61	53	
	NO. OF EXAMINED ANIMALS NO. OF ANIMALS WITH TUMORS NO. OF ANIMALS WITH SINGLE TUMORS NO. OF ANIMALS WITH MULTIPLE TUMORS NO. OF BENIGN TUMORS NO. OF MALIGNANT TUMORS	NO. OF EXAMINED ANIMALS NO. OF ANIMALS WITH TUMORS NO. OF ANIMALS WITH SINGLE TUMORS NO. OF ANIMALS WITH MULTIPLE TUMORS NO. OF BENIGN TUMORS NO. OF MALIGNANT TUMORS	NO. OF EXAMINED ANIMALS 50 NO. OF ANIMALS WITH TUMORS NO. OF ANIMALS WITH SINGLE TUMORS NO. OF ANIMALS WITH MULTIPLE TUMORS 14 NO. OF BENIGN TUMORS 41 NO. OF MALIGNANT TUMORS 14	NO. OF EXAMINED ANIMALS 50 50 NO. OF ANIMALS WITH TUMORS 39 35 NO. OF ANIMALS WITH SINGLE TUMORS 25 23 NO. OF ANIMALS WITH MULTIPLE TUMORS 14 12 NO. OF BENIGN TUMORS 41 41 NO. OF MALIGNANT TUMORS 14 10	NO. OF EXAMINED ANIMALS 50 50 50 NO. OF ANIMALS WITH TUMORS 39 35 38 NO. OF ANIMALS WITH SINGLE TUMORS 25 23 21 NO. OF ANIMALS WITH MULTIPLE TUMORS 14 12 17 NO. OF BENIGN TUMORS 41 41 46 NO. OF MALIGNANT TUMORS 14 10 15	NO. OF EXAMINED ANIMALS 50 50 50 50 50 50 NO. OF ANIMALS WITH TUMORS 39 35 38 36 NO. OF ANIMALS WITH SINGLE TUMORS 25 23 21 26 NO. OF ANIMALS WITH MULTIPLE TUMORS 14 12 17 10 NO. OF BENIGN TUMORS 41 41 46 44 NO. OF MALIGNANT TUMORS 14 10 15 9

(HPTO70) BAIS3

APPENDIX N 1

HISTOLOGICAL FINDINGS: NEOPLASTIC LESIONS: SUMMARY

RAT: MALE: ALL ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : MALE

Organ		Name Control f animals on Study 50	320 ррш 50	800 ppm 49	2000 ррш 50
{Integumentary	y system/appandage)				
skin/app	squamous cell papilloma	<50> 1 (2%)	<50> 2 (4%)	<49> 1 (2%)	<50> 1 (2%)
	trichoepithelioma	0 (0%)	0 (0%)	0 (0%)	1 (2%)
	keratoacanthoma	3 (6%)	2 (4%)	1 (2%)	2 (1%)
	squamous cell carcinoma	0 (0%)	0 (0%)	1 (2%)	1 (2%)
	trichoepithelioma:malignant	1 (2%)	0 (0%)	0 (0%)	0 (0%)
	melanoma:malignant	0 (0%)	0 (0%)	0 (0%)	1 (2%)
subcutis	fibroma	<50> 7 (14%)	<50> 2 (4%)	<49> 4 (8%)	<50> 3 (6%)
	lipoma	0 (0%)	1 (2%)	1 (2%)	0 (0%)
	schwannoma:malignant	1 (2%)	0 (0%)	0 (0%)	0 (0%)
	carcinoma:NOS	0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Respiratory s	system)				
nasal cavit	adenoma	<50> 0 (0%)	<50> 0 (0%)	<49> 1 (2%)	<50> 0 (0%)
lung	bronchiolar-alveolar adenoma	<50> 1 (2%)	<50> 3 (6%)	<49> 2 (4%)	<50> 1 (2%)
	a: Number of animals examined at the site b: Number of animals with neoplasm c: b / a * 100			•	

(HPT085)

BAIS3

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

TYPE: AI

)rgan		oup Name o. of animals on Study		tro1 50	3	20 ppm 50		800	9 ppm	20	00 ppm 50
Respiratory s	ystem)										
ung	bronchiolar—alveolar carcinoma	(50> 0%)	0	<50> (0%)	1		(49) (2%)	0	<50> (0%)
Hematopoietic	system]										
spleen	mononuclear cell leukemia	(50> 12%)	4	<50> (8%)	6		(49> (12%)	5	<50> (10%)
	hemangiosarcoma	(0 (0%)	0	(0%)	1	I	(2%)	0	(0%)
Digestive sys	tem)										
tongue	squamous cell carcinoma	(50> (0%)	0	<50> (0%)	((49> (0%)	1	<50> (2%)
salivary gl	adenocarcinoma	((50> (0%)	0	<50> (0%)	2		(49) (4%)	0	<50> (0%)
tomach	squamous cell papilloma	;		(50> (2%)	1	<50> (2%)	()	<49> (0%)	0	<50> (0%)
	squamous cell carcinoma	(0 ((0%)	0	(0%)	()	(0%)	1	(2%)
mall intes	leiomyoma	:		(50> (2%)	0	<50> (0%)	:		(49) (2%)	0	<50> (0%)
liver	hepatocellular adenoma	:		(50> (2%)	4	<50> (8%)	•		(49) (8%)	10	<50> (20%)
ancreas	islet cell adenoma	;		(50> (6%)	3	<50> (6%)	(<49> (0%)	3	<50> (6%)
{Urinary syste	m)										
ci dne y	lipoma			(50> (2%)	0	<50> (0%)	1		<49> (0%)	0	<50> (0%)

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

REPORT TYPE : A1 SEX : MALE

(HPT085)

ALL ANIMALS (0-105W)

800 ppm 49	2000 ppm 50
<49> 0 (0%)	<50> 0 (0%)
<49> 14 (29%)	<50> 13 (26%)
<49> 6 (12%)	<50> 11 (22%)
1 (2%)	2 (4%)
2 (4%)	2 (4%)
0 (0%)	1 (2%)
<49> 3 (6%)	<50> 3 (6%)
0 (0%)	0 (0%)
2 (4%)	0 (0%)
<49> 35 (71%)	<50> 35 (70%)
1 (2%)	2 (4%)
	· · ·

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE TIDD THIEMEDD (O 100%)

Group Name Control 320 ppm 800 ppm 2000 ppm 50 No. of animals on Study 50 50 49 Organ_ Findings_ (Reproductive system) <50> <50> epididymis <49> <50> fibroma 0 (0%) 1 (2%) 0 (0%) 0 (0%) <50> ⟨50⟩ <50> **<49>** mammary gl 0 (0%) adenoma 0 (0%) 2 (4%) 0 (0%) 0 (0%) 1 (2%) 0 (0%) 0 (0%) fibroadenoma <50> ⟨50⟩ **<49>** <50> prep/cli gl 1 (2%) 0 (0%) 1 (2%) 2 (4%) adenoma {Nervous system} brain <50> <50> (49) <50> 0 (0%) 1 (2%) 0 (0%) 0 (0%) malignant reticulosis {Special sense organs/appendage} <50> <49> <50> Zymbal gl <50> 1 (2%) 0 (0%) 0 (0%) adenoma 0 (0%) squamous cell carcinoma 0 (0%) 0 (0%) 0 (0%) 1 (2%) (Musculoskeletal system) bone <50> <50> <49> <50> 0 (0%) 1 (2%) 0 (0%) 0 (0%) osteoma osteosarcoma 1 (2%) 0 (0%) 1 (2%) 0 (0%) <50> <50> <49> <50> vertebra chordoma:malignant 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

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : MALE PAGE: 5

Organ		oup Name C of animals on Study	Control 50	320 ppm 50	800 ppm 49	2000 ppm 50
Musculoskele	stal system)					
vertebra	sarcoma:NOS	0	<50> (0%)	<50> 0 (0%)	<49> 1 (2%)	<50> 0 (0%)
Body cavitie	(s)					
peritoneum	mesothelioma	3	<50> (6%)	<50> 0 (0%)	<49> 1 (2%)	<50> 1 (2%)
<a>> b (c)	a: Number of animals examined at the site b: Number of animals with neoplasm c: b/a*100					
(IIPT085)						

(HPT085)

APPENDIX N 2

HISTOLOGICAL FINDINGS: NEOPLASTIC LESIONS: SUMMARY

RAT: FEMALE: ALL ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

Organ		up Name Control of animals on Study 50	320 ppm 50	800 ppm 50	2000 ppm 50	
{Integumenta	ry system/appandage)					
skin/app	trichoepithelioma	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	
	keratoacanthoma	1 (2%)	0 (0%)	0 (0%)	0 (0%)	
subcutis	fibroma	<50> 0 (0%)	<49> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	
	sarcoma:NOS	1 (2%)	0 (0%)	0 (0%)	0 (0%)	
{Respiratory	system)					
lung	bronchiolar-alveolar adenoma	<50> 1 (2%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	
	bronchiolar-alveolar carcinoma	0 (0%)	0 (0%)	1 (2%)	0 (0%)	
{Hematopoiet	ic system}					
spleen	mononuclear cell leukemia	<50> 7 (14%)	<50> 6 (12%)	<50> 6 (12%)	<50> 8 (16%)	
{Digestive s	ystem)					
stomach	squamous cell papilloma	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	
liver	hepatocellular adenoma	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 3 (6%)	
pancreas	acinar cell adenocarcinoma	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	
(a) b (c)	a: Number of animals examined at the site b: Number of animals with neoplasm c: b/a*100					
(HPT085)						RATS3

(IIPT085)

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

Organ	Findings	Group Name No. of animals on Study		Sontrol 50		20 ppm 50		300 ppm 50	20	00 ppm 50
{Urinary syst	em}									
ırin bladd	transitional cell papilloma		0	<50> (0%)	1	<50> (2%)	1	<50> (2%)	0	<50> (0%)
Endocrine sy	stem)									
oituitary	adenoma		19	<50> (38%)	15	<50> (30%)	16	<50> (32%)	15	<49> (31%)
	adenocarcinoma		0	(0%)	0	(0%)	1	(2%)	1	(2%)
thyroid	C-cell adenoma		6	<50> (12%)	4	<50> (8%)	5	<50> (10%)	8	<50> (16%)
	follicular adenoma		1	(2%)	2	(4%)	0	(0%)	0	(0%)
	C-cell carcinoma		0	(0%)	2	(4%)	1	(2%)	0	(0%)
drenal	pheochromocytoma		1	<49> (2%)	1	<50> (2%)	2	<50> (4%)	0	<50> (0%)
Reproductive	system)									
vary	mesothelioma:benign		0	<50> (0%)	1	<50> (2%)	0	<50> (0%)	0	<50> (0%)
ıterus	leiomyoma		0	<50> (0%)	1	<50> (2%)	0	<50> (0%)	0	<50> (0%)
	endometrial stromal polyp		7	(14%)	8	(16%)	11	(22%)	7	(14%)
	adenocarcinoma		1	(2%)	0	(0%)	2	(4%)	0	(0%)
<a>> b (c)	a: Number of animals examined at the site b: Number of animals with neoplasm c: b/a*	100								

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1 SEX : FEMALE

PAGE: 8

Organ	Findings No. of	Name Control animals on Study 50	320 ppm 50	800 ppm 50	2000 ppm 50
{Reproductive	system)				
uterus	endometrial stromal sarcoma	<50> 4 (8%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
mammary gl	adenoma	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)	<50> 1 (2%)
	fibroadenoma	3 (6%)	3 (6%)	6 (12%)	7 (14%)
	adenocarcinoma	1 (2%)	0 (0%)	0 (0%)	0 (0%)
prep/cli gl	adenoma	<50> 1 (2%)	<50> 2 (4%)	<50> 3 (6%)	<50> 2 (4%)
{Nervous syste	em)				
brain	malignant reticulosis	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	pinealoma:malignant	0 (0%)	0 (0%)	1 (2%)	0 (0%)
spinal cord	glioma	<49> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
{Musculoskelet	tal system}				
bone	osteosarcoma	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)

(HPT085)

APPENDIX O 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

RAT: MALE: (2-YEAR STUDY)

STUDY No. : 0347 NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

ANIMAL : RAT F344/DuCrj SEX : MALE

Group Name Control 320 ppm 800 ppm 2000 ppm SITE : skin/appendage TUMOR : keratoacanthoma Tumor rate Overall rates(a) 3/50(6,0) 2/50(4,0) 1/49(2.0) 2/50(4.0) 7.50 Adjusted rates(b) 4.55 2.70 4.44 3/40(7.5) Terminal rates(c) 2/44(4.5) 1/37(2.7) 1/35(2.9) Statistical analysis Peto test Standard method(d) P = ------Prevalence method(d) P = 0.5947Combined analysis(d) P = -----Cochran-Armitage test(e) P = 0.7049Fisher Exact test(e) P = 0.5000P = 0.3163P = 0.5000SITE : skin/appendage TUMOR : squamous cell papilloma, keratoacanthoma Tumor rate Overall rates(a) 4/50(8.0) 4/50(8.0) 2/49(4.1) 3/50(6.0) Adjusted rates(b) 10.00 9.09 4.88 6.67 Terminal rates(c) 4/40 (10.0) 4/44(9.1) 1/37(2.7) 2/35(5.7) Statistical analysis Peto test Standard method(d) P = -----P = 0.6351Prevalence method(d) Combined analysis(d) Cochran-Armitage test(e) P = 0.6354Fisher Exact test(e) P = 0.6425P = 0.3485P = 0.5000SITE : skin/appendage TUMOR : squamous cell papilloma, keratoacanthoma, squamous cell carcinoma Tumor rate Overall rates(a) 4/50(8.0) 4/50(8.0) 3/49(6.1) 4/50(8.0) Adjusted rates(b) 10.00 9.09 8.89 7.32 Terminal rates(c) 4/40(10.0) 4/44(9.1) 1/37(2,7) 3/35(8.6) Statistical analysis Peto test Standard method(d) P = ----Prevalence method(d) P = 0.4471Combined analysis(d) P = ----Cochran-Armitage test(e) P = 0.9948Fisher Exact test(e) P = 0.6425P = 0.5114P = 0.6425

(HPT360A)

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STUDY No. : 0347

ANIMAL : RAT F344/DuCrj

SEX : MALE

Group Name	Control	320 ppm	800 ppm	2000 ppm	
	SITE : subcutis				
	TUMOR : fibroma				
fumor rate	5/50(14 0)	0(50(4.0)	1/10(0.0)	0/50/ 0.0	
Overall rates(a)	7/50(14.0)	2/50(4.0)	4/49(8.2)	3/50 (6.0)	
Adjusted rates(b) Terminal rates(c)	13. 95 4/40(10. 0)	4. 55	9.76 3/37(8.1)	6. 98 2/35(5. 7)	
tatistical analysis	4/40(10.0)	2/44(4.5)	3/3/(8.1)	2/35(5.1)	
Peto test					
Standard method(d)	P = 1.0000 ?				
Prevalence method(d)	P = 0.6939				
Combined analysis(d)	P = 0.7741				
Cochran-Armitage test(e)	P = 0.3665				
Fisher Exact test(e)	1 ~ 0.3003	P = 0.0798	P = 0.2740	P = 0.1589	
	SITE : lung				
_	TUMOR : bronchiolar-alveola	r adenoma			
fumor rate	, the first of the second	- 4 4			
Overall rates(a)	1/50(2.0)	3/50(6.0)	2/49(4.1)	1/50(2.0)	
Adjusted rates(b)	2. 50	6. 82	5. 41	2. 86	
Terminal rates(c)	1/40(2.5)	3/44(6.8)	2/37(5.4)	1/35(2.9)	
Statistical analysis					
Poto test					
Standard method(d)	P =				
Prevalence method(d)	P = 0.5875				
Combined analysis(d)	P =				
Cochran-Armitage test(e)	P = 0.6496				
Fisher Exact test(e)		P = 0.3087	P = 0.4923	P = 0.7525	
	SITE : lung				
		r adenoma, bronchiolar-alveolar carcinom	a		
umor rate					
Overall rates(a)	1/50(2.0)	3/50(6.0)	3/49 (6.1)	1/50(2.0)	
Adjusted rates(b)	2. 50	6. 82	8. 11	2. 86	
Terminal rates(c)	1/40(2.5)	3/44(6.8)	3/37(8.1)	1/35(2.9)	
Statistical analysis					
Peto test					
Standard method(d)	P =				
Prevalence method(d)	P = 0.5694				
Combined analysis(d)	P =				
Cochran-Armitage test(e)	P = 0.6770				
		P = 0.3087	P = 0.3010	P = 0.7525	

STUDY No. : 0347 ANIMAL : RAT F344/DuCrj

SEX : MALE

Group Name	Control	320 ppm	Mqq 008	2000 ppm
	SITE : spleen			
	TUMOR : mononuclear cell leukemia			
Tumor rate	0/50(10.0)	1/50/ 0.0	0 (40 (40 0)	T/TO (10 A)
Overall rates(a)	6/50 (12. 0)	4/50(8.0)	6/49(12.2)	5/50(10.0)
Adjusted rates(b) Terminal rates(c)	8. 51 3/40(7. 5)	4. 55 2/44(4. 5)	2. 70 1/37 (2. 7)	5. 71 2/35(5. 7)
Statistical analysis	3/40(1.5)	2/44(4.5)	1/31(2.1)	2/35(5.1)
Peto test				
Standard method(d)	P = 0.2653			
Prevalence method(d)	P = 0.7036			
Combined analysis(d)	P = 0.4531			
Cochran-Armitage test(e)	P = 0. 9281			
Fisher Exact test(e)		P = 0.3703	P = 0.6058	P = 0.5000
Tumor rate Overall rates(a) Adjusted rates(b) Terminal rates(c) Statistical analysis Peto test Standard method(d) Prevalence method(d)	SITE : liver TUMOR : hepatocellular adenoma 1/50(2.0)	4/50(8.0) 9.09 4/44(9.1)	4/49(8. 2) 10. 81 4/37(10. 8)	10/50(20. 0) 23. 68 8/35(22. 9)
Combined analysis(d)	P =			
Cochran-Armitage test(e)	P = 0.0022**			
Fisher Exact test(e)		P = 0.1811	P = 0.1748	P = 0.0039**
	SITE : pancreas TUMOR : islet cell adenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	3/50(6.0)	0/49(0.0)	3/50(6.0)
Adjusted rates(b)	7. 50	6. 82	0.0	7. 32
Terminal rates(c)	3/40(7.5)	3/44(6.8)	0/37(0.0)	2/35(5.7)
Statistical analysis				
Peto test	P =			
Standard method(d)	P = 0, 4397			
Prevalence method(d) Combined analysis(d)	P =			
Cochran-Armitage test(e)	P = 0.9789			
Fisher Exact test(e)	1 - 0.9109	P = 0.6611	P = 0.1250	P = 0 6611
risher Exact test(0)		r = 0.0011	P = 0.1250	P = 0.6611

(HPT360A)

STUDY No. : 0347

: RAT F344/DuCrj ANIMAL : MALE SEX

Group Name Control 320 ppm 800 ppm 2000 ppm SITE : pituitary gland TUMOR : adenoma Tumor rate Overall rates(a) 21/50(42.0) 22/49 (44.9) 14/49(28.6) 13/50(26.0) Adjusted rates(b) 47.50 45, 45 32.50 25, 71 Terminal rates(c) 19/40 (47.5) 19/43 (44.2) 12/37 (32.4) 9/35(25.7) Statistical analysis Peto test Standard method(d) P = 0.0620Prevalence method(d) P = 0.9909Combined analysis(d) P = 0.9270Cochran-Armitage test(e) P = 0.0405*Fisher Exact test(e) P = 0.4649P = 0.1175P = 0.0695SITE : thyroid TUMOR : C-cell adenoma Tumor rate Overall rates(a) 7/50(14.0) 10/50(20.0) 6/49(12.2) 11/50(22.0) Adjusted rates(b) 15.56 22.73 15.00 28. 21 Terminal rates(c) 6/40(15.0) 10/44(22.7) 5/37(13,5) 9/35(25.7) Statistical analysis Peto test Standard method(d) P = ----Prevalence method(d) P = 0.1141Combined analysis(d) P = ------P = 0.3890Cochran Armitage test(e) Fisher Exact test(e) P = 0.2977P = 0.5158P = 0.2178SITE : thyroid TUMOR : C-cell carcinoma Tumor rate 1/50(2.0) 2/49(4.1) Overall rates(a) 4/50(8.0) 2/50(4.0) Adjusted rates(b) 2.50 9.09 5.41 5, 71 1/40(2.5) Terminal rates(c) 4/44(9.1) 2/37(5.4) 2/35(5.7) Statistical analysis Peto test P = -----Standard method(d) Prevalence method(d) P = 0.4244Combined analysis(d) P = ----Cochran-Armitage test(e) P = 0.9503Fisher Exact test(e) P = 0.1811P = 0.4923P = 0.5000

(HPT360A)

STUDY No. : 0347

ANIMAL : RAT F344/DuCrj SEX : MALE

Group Name	Control	320 ррт	Mqq 008	2000 ррт
	SITE : thyroid			
	TUMOR : C-cell adenoma, C-cell	carcinoma		
fumor rate	0/50/ 15 0	14/50/ 00 0	0/40/ 10.0)	10/50/ 00 0)
Overall rates(a) Adjusted rates(b)	8/50 (16. 0) 17. 78	14/50 (28. 0) 31. 82	8/49(16.3) 20.00	13/50(26. 0) 33. 33
Terminal rates(c)	7/40(17. 5)	14/44(31.8)	7/37 (18. 9)	11/35(31. 4)
tatistical analysis	77 20 (211 0)	11/11/01/0/	1701(10.0)	11,00(01.1)
Peto test Standard method(d)	P =			
Prevalence method(d)	P = 0. 1268			
Combined analysis(d)	P =			
Cochran-Armitage test(e)	P = 0.4495			
Fisher Exact test(e)	• •	P = 0.1135	P = 0.5900	P = 0.1631
Cumor rate Overall rates(a) Adjusted rates(b) Terminal rates(c) Statistical analysis Peto test Standard method(d) Prevalence method(d) Combined analysis(d) Cochran-Armitage test(e) Fisher Exact test(e)	SITE : thyroid TUMOR : follicular adenoma, for	1/50(2.0) 2.27 1/44(2.3) P = 0.5000	1/49(2.0) 2.70 1/37(2.7) P = 0.4949	3/50 (6.0) 8.57 3/35 (8.6) P = 0.1212
	SITE : adrenal gland TUMOR : pheochromocytoma			
umor rate				
Overall rates(a)	3/50(6.0)	3/50(6.0)	3/49(6.1)	3/50(6.0)
Adjusted rates(b)	7. 50	6. 82	6. 82	8. 57
Terminal rates(c) tatistical analysis Peto test	3/40(7.5)	3/44(6.8)	2/37(5.4)	3/35(8.6)
Standard method(d)	P =			
Prevalence method(d)	P = 0.4122			
Combined analysis(d)	P =			
Cochran-Armitage test(e)	P = 0.9996	D 0.0011	D 0.0717	
Fisher Exact test(e)		P = 0.6611	P = 0.6515	P = 0.6611

(HPT360A)

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BAIS3

STUDY No. : 0347

ANIMAL : RAT F344/DuCrj

SEX : MALE

(HPT360A)

800 ppm 2000 ppm 320 ppm Group Name Control SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma: malignant Tumor rate 4/50(8.0) 5/50(10.0) 5/49(10.2) 3/50(6.0) Overall rates(a) 8.57 9.30 Adjusted rates(b) 7.50 11.36 3/40(7.5) 5/44(11.4) 3/37(8.1) 3/35(8.6) Terminal rates(c) Statistical analysis Peto test Standard method(d) P = 0.6858Prevalence method(d) P = 0.5313P = 0.6189Combined analysis(d) Cochran-Armitage test(e) P = 0.5808P = 0.4870P = 0.5000Fisher Exact test(e) P = 0.5000SITE : testis TUMOR : interstitial cell tumor Tumor rate 28/50 (56.0) 31/50(62.0) 35/49 (71.4) 35/50(70.0) Overall rates(a) Adjusted rates(b) 63.41 65.96 79.49 83.33 Terminal rates(c) 25/40(62.5) 29/44 (65.9) 29/37 (78.4) 29/35(82.9) Statistical analysis Peto test Standard method(d) P = -----Prevalence method(d) P = 0.0136*Combined analysis (d) P = ---P = 0.1541Cochran-Armitage test(e) Fisher Exact test(e) P = 0.3423P = 0.0826P = 0.1069SITE : mammary gland TUMOR : adenoma, fibroadenoma Tumor rate Overall rates(a) 0/50(0.0) 3/50(6.0) 0/49(0.0) 0/50(0.0) Adjusted rates(b) 0.0 6.82 0.0 0.0 Terminal rates(c) 0/40(0.0) 3/44(6.8) 0/37(0.0) 0/35(0.0) Statistical analysis Peto test Standard method(d) P = ----Prevalence method(d) P = 0.8192Combined analysis(d) P = -----Cochran-Armitage test(e) P = 0.2920P = N.C.Fisher Exact test(e) P = 0.1212P = N. C.

STUDY No. : 0347

ANIMAL : RAT F344/DuCrj

SEX : MALE

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Group Name	Control	320 ppm	800 ppm	2000 ppm	
	SITE : mammary gland TUMOR : adenoma, fibroadenoma,	alanacanainama			
umor rate	TOMOR . adenoma, Ilbroadenoma,	adellocarcinolia			
Overall rates(a)	0/50(0.0)	3/50(6.0)	0/49(0.0)	0/50(0.0)	
Adjusted rates(b)	0.0	6. 82	0.0	0.0	
Terminal rates(c)	0/40(0.0)	3/44(6.8)	0/37(0.0)	0/35(0.0)	
tatistical analysis	0, 10 (0.0)	0, 11(0.0,	0, 0. (0, 0,	, ,	
Peto test					
Standard method(d)	P =				
Prevalence method(d)	P = 0.8192				
Combined analysis(d)	P =				
Cochran-Armitage test(e)	P = 0.2920				
Fisher Exact test(e)		P = 0.1212	P = N.C.	P = N.C.	
Cumor rate Overall rates(a)	SITE : peritoneum TUMOR : mesothelioma 3/50(6.0)	0/50(0,0)	1/49(2.0)	1/50(2.0)	
Adjusted rates(b)	5. 00	0.0	2.70	2. 86	
Terminal rates(c)	2/40(5.0)	0/44(0.0)	1/37(2.7)	1/35(2.9)	
tatistical analysis Peto tost		3/11(0.0/	1/01(2.1/	1,000 210,	
Standard method(d)	P = 1.0000 ? P = 0.4968				
Prevalence method(d) Combined analysis(d)	P = 0.4968 P = 0.6734				
Cochran-Armitage test(e)	P = 0.6754 P = 0.5132				
Fisher Exact test(e)	1 0.0102	P = 0.1212	P = 0.3163	P = 0.3087	
TOROL DAGGE		0.1212	7 0.0100	1 0.0001	
PT360A)					

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

(b): Kaplan-Meire 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 out comes can not estimated or this P-value is beyond the estimated P-value.

: There is no data which should be statistical analysis.

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

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

APPENDIX O 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

RAT: FEMALE: (2-YEAR STUDY)

STUDY No. : 0347 NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS ANIMAL : RAT F344/DuCrj

SEX : FEMALE

Group Name	Control	320 ppm	800 ppm	2000 ppm	
	SITE : spleen				
	TUMOR : mononuclear cell leukemi	a			
Tumor rate	7/50(14.0)	C/FO/ 10 0)	6 (50 (10.0)	0/50/ 10 0)	
Overall rates(a)	7/50(14.0)	6/50(12.0) 7.50	6/50 (12. 0) 9. 52	8/50 (16. 0) 9. 52	
Adjusted rates(b) Terminal rates(c)	16.22 6/37(16.2)	3/40(7.5)	4/42(9.5)	4/42(9.5)	
Statistical analysis	0/3/(10.2/	3/40(1.3/	4/ 12 (3.3/	1/12(3.3)	
Peto test					
Standard method(d)	P = 0.1610				
Prevalence method(d)	P = 0.6977				
Combined analysis(d)	P = 0.4086				
Cochran-Armitage test(e)	P = 0.6512				
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.5000	
Tumor rate Overall rates(a) Adjusted rates(b) Terminal rates(c) Statistical analysis Poto test Standard method(d) Prevalence method(d) Combined analysis(d)	SITE : liver TUMOR : hopatocollular adenoma 0/50(0.0)	1/50(2.0) 2.50 1/40(2.5)	0/50(0.0) 0.0 0/42(0.0)	3/50(6.0) 7.14 3/42(7.1)	
Cochran-Armitage test(e) Fisher Exact test(e)	P = 0.0334*	P = 0.5000	P = N.C.	P = 0.1212	
TOUGE DAUGE FEST (6)		r - 0. 9000	L - 14. C.	r - 0.1212	
	SITE : pituitary gland TUMOR : adenoma				
fumor rate					
Overall rates(a)	19/50 (38. 0)	15/50(30.0)	16/50(32.0)	15/49 (30. 6)	
Adjusted rates(b)	40. 54	25. 00	34. 88	31. 11	
Terminal rates(c)	15/37(40.5)	10/40 (25. 0)	14/42(33.3)	12/41 (29. 3)	
Statistical analysis					
Peto test	P = 0 0742				
Standard method(d) Prevalence method(d)	P = 0.9742 P = 0.6093				
Combined analysis(d)	P = 0.8619				
Cochran-Armitage test(e)	P = 0.5894				
Fisher Exact test(e)	1 0.0001	P = 0.2634	P = 0.3377	P = 0.2872	

(HPT360A)

ANIMAL : RAT F344/DuCrj
SEX : FEMALE PAGE : 9

Group Name	Control	320 ppm	800 ppm	2000 ppm	
	SITE : pituitary gland				
nor rate	TUMOR : adenoma, adenocarcinoma	ı			
verall rates(a)	19/50(38.0)	15/50(30.0)	17/50(34.0)	16/49(32.7)	
djusted rates(b)	40. 54	25. 00	34. 88	31. 11	
erminal rates(c) atistical analysis	15/37(40.5)	10/40(25. 0)	14/42(33.3)	12/41(29. 3)	
eto test					
Standard method(d)	P = 0.8868				
Prevalence method(d) Combined analysis(d)	P = 0.6093 P = 0.7980				
Cochran-Armitage test(e)	P = 0.7739				
Fisher Exact test(e)	1 - 0. 1100	P = 0.2634	P = 0.4176	P = 0.3648	
	SITE : thyroid				
	TUMOR : C-cell adenoma				
mor rate					
verall rates(a)	6/50(12.0)	4/50(8.0)	5/50(10.0)	8/50(16.0)	
djusted rates(b)	16. 22	9. 52	11. 90	19. 05	
erminal rates(c)	6/37(16.2)	3/40 (7.5)	5/42(11.9)	8/42(19.0)	
atistical analysis eto test					
Standard method(d)	P =				
Prevalence method(d)	P = 0.2663				
Combined analysis(d)	P =				
ochran-Armitage test(e)	P = 0.3298				
isher Exact test(e)		P = 0.3703	P = 0.5000	P = 0.3871	
	SITE : thyroid				
	TUMOR : C-cell adenoma, C-cell	carcinoma			
mor rate					
Overall rates(a)	6/50(12.0)	6/50(12.0)	6/50(12.0)	8/50(16.0)	
djusted rates(b)	16. 22	14. 29	14. 29	19. 05	
erminal rates(c)	6/37(16.2)	5/40(12.5)	6/42(14.3)	8/42(19.0)	
atistical analysis					
eto test Standard method(d)	P =				
Prevalence method(d)	P =				
Combined analysis(d)	P =				
ochran-Armitage test(e)	P = 0.4995				
isher Exact test(e)	. 3. 1000	P = 0.6202	P = 0.6202	P = 0.3871	

(HPT360A)

STUDY No. : 0347

STUDY No. : 0347

ANIMAL : RAT F344/DuCrj SEX : FEMALE

Control 320 ppm 800 ppm 2000 ppm Group Name SITE : uterus TUMOR : endometrial stromal polyp Tumor rate 11/50(22.0) 7/50(14.0) Overall rates(a) 7/50(14.0) 8/50(16.0) Adjusted rates(b) 16.22 20.00 23.81 16.67 7/42(16.7) Terminal rates(c) 6/37 (16.2) 8/40(20.0) 10/42(23.8) Statistical analysis Peto test Standard method(d) P = 1.0000 ? P = 0.5480Prevalence method(d) Combined analysis(d) P = 0.6255Cochran-Armitage test(e) P = 0.9241Fisher Exact test(e) P = 0.2178P = 0.6129P = 0.5000SITE : uterus TUMOR : endometrial stromal sarcoma Tumor rate Overall rates(a) 4/50(8.0) 1/50(2.0) 0/50(0.0) 0/50(0.0) Adjusted rates(b) 2.70 2.50 0.0 0.0 Terminal rates(c) 1/37(2.7) 1/40(2.5) 0/42(0.0) 0/42(0.0) Statistical analysis Peto test Standard method(d) P = 0.9895Prevalence method(d) P = 0.8937Combined analysis(d) P = 0.9960Cochran-Armitage test(e) P = 0.0328*Fisher Exact test(e) P = 0.1811P = 0.0587P = 0.0587SITE : uterus TUMOR : endometrial stromal polyp, endometrial stromal sarcoma Tumor rate Overall rates(a) 11/50(22.0) 9/50(18.0) 11/50(22.0) 7/50(14.0) Adjusted rates(b) 18.92 22, 50 23.81 16.67 Terminal rates(c) 7/37(18.9) 9/40(22.5) 10/42(23.8) 7/42(16.7) Statistical analysis Peto test Standard method(d) P = 0.9964Prevalence method(d) P = 0.6770Combined analysis(d) P = 0.8836Cochran-Armitage test(e) P = 0.3475Fisher Exact test(e) P = 0.4016P = 0.5952P = 0.2178

(HPT360A)

BAIS3

STUDY No. : 0347

ANIMAL : RAT F344/DuCrj SEX : FEMALE

(HPT360A)

NIMAL : RAT F344/DuCrj EX : FEMALE					PAGE : 11
Group Name	Control	320 ppm	800 ppm	2000 ppm	
	SITE : uterus				
T	TUMOR : leiomycma, endometria	al stromal polyp,endometrial stromal sam	rcoma		
Tumor rate Overall rates(a)	11/50(22.0)	10/50(20.0)	11/50(22.0)	7/50(14.0)	
Adjusted rates(b)	18. 92	25. 00	23. 81	16. 67	
Terminal rates(c)	7/37(18. 9)	10/40(25.0)	10/42(23.8)	7/42(16. 7)	
Statistical analysis Peto test	1,011 10.07	10, 10 (20.0)	20, 25 (500 0)	.,	
. Standard method(d)	P = 0.9964				
Prevalence method(d)	P = 0.7181				
Combined analysis(d)	P = 0.9031				
Cochran-Armitage test(e)	P = 0.2991				
Fisher Exact test(e)		P = 0.5000	P = 0.5952	P = 0.2178	
	SITE : mammary gland TUMOR : fibroadonoma				
Tumor rate	0/50/ 0.0		0/50(10.0)	7/50/ 14 0)	
Overall rates(a)	3/50(6.0)	3/50(6.0)	6/50 (12. 0) 14. 29	7/50(14.0) 14.29	
Adjusted rates(b)	7. 14	7.50 3/40(7.5)	6/42(14. 3)	6/42(14. 3)	
Terminal rates(c) Statistical analysis Peto test	2/37(5.4)	3/40(1. 3)	0/42(14.3)	0/42(14. 3)	
Standard method(d)	P = 0.1361				
Prevalence method(d)	P = 0.1373				
Combined analysis(d)	P = 0.0787				
Cochran-Armitage test(e)	P = 0.1169				
Fisher Exact test(e)		P = 0.6611	P = 0.2435	P = 0.1589	
	SITE : mammary gland TUMOR : adenoma, fibroadenom	a			
Tumor rate					
Overall rates(a)	4/50(8.0)	3/50(6.0)	6/50 (12. 0)	8/50 (16. 0)	
Adjusted rates(b)	9. 52	7. 50	14. 29	16. 67	
Terminal rates(c) Statistical analysis Peto test	3/37(8.1)	3/40(7.5)	6/42(14.3)	7/42(16. 7)	
Standard method(d)	P = 0.1361				
Prevalence method(d)	P = 0.1232				
Combined analysis(d)	P = 0.0712				
Cochran-Armitage test(e)	P = 0.1024				
		P = 0.5000	P = 0.3703	P = 0.1783	

BAIS3

STUDY No. : 0347

ANIMAL : RAT F344/DuCrj

SEX : FEMALE

Group Name Control 320 ppm Mqq 008 2000 ppm SITE : mammary gland TUMOR : adenoma, fibroadenoma, adenocarcinoma Tumor rate Overall rates(a) 5/50(10.0) 3/50(6.0) 6/50 (12.0) 8/50(16.0) 16.67 Adjusted rates(b) 11.90 7.50 14.29 Terminal rates(c) 4/37(10.8) 3/40(7.5) 6/42(14.3) 7/42(16.7) Statistical analysis Peto test Standard method(d) P = 0.1361Prevalence method(d) P = 0.1844Combined analysis(d) P = 0.1132Cochran-Armitage test(e) P = 0.1712Fisher Exact test(e) P = 0.3575P = 0.5000P = 0.2768SITE : preputial/clitoral gland TUMOR : adenoma Tumor rate 1/50(2.0) 2/50(4,0) 3/50(6.0) 2/50(4.0) Overall rates(a) Adjusted rates(b) 0.0 4.35 7.14 4.76 2/42(4.8) 0/37(0.0) 1/40(2.5) 3/42(7.1) Terminal rates(c) Statistical analysis Peto test Standard method(d) P = 1.0000 ? P = 0.2392Prevalence method(d) P = 0.3756Combined analysis(d) Cochran-Armitage test(e) P = 0.7040Fisher Exact test(e) P = 0.5000P = 0.3087P = 0.5000(HPT360A)

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

(b): Kaplan-Meire 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 out comes can not 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.

PAGE: 12

BAIS3

APPENDIX P 1

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY

RAT: MALE: ALL ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

		Group Name No. of Animals on Study	Control 50	320 ppm 50	800 ppm 49	2000 ppm 50
Organ	Findings					
fe						
	ry system/appandage)					
subcutis	metastasis bone tumor		<50> 1	<50> 0	<49> 0	<50> 0
Respiratory	system}					
lung	leukemic cell infiltration		<50> 4	<50> 4	<49> 4	<50> 3
	metastasis:adrenal tumor		0	0	1	0
	metastasis:thyroid tumor		0	1	1	0
	metastasis:bone tumor		1	0	1	0
	metastasis:vertebra tumor		0	0	1	0
	metastasis:skin/appendage tumor		1	0	0	0
	metastasis:salivary gland tumor		0	0	1	0
{ 	ic system)					
oone marrow	leukemic cell infiltration		<50> · 2	<50>	<49> 3	<50> 0
ymph node	leukemic cell infiltration		<50> 1	< 50> 1	<49> 4	<50> 1
	metastasis:skin/appendage tumor		1	0	0	0
	metastasis:salivary gland tumor		0	0	1	0
Digestive s	ystem}					
liver	leukemic cell infiltration		<50> 5	<50> 2	<49> 4	<50> 5
< a > b	a : Number of animals examined at t b : Number of animals with lesion	he site				

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj

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

REPORT TYPE : A1 SEX : MALE

	i	Group Name No. of Animals on Study	Control 50	320 ppm 50	800 ppm 49	2000 ppm 50
Organ	Findings					
{Digestive sys	tem}					
liver			<50>	<50>	< 4 9>	<50>
livei	metastasis:peritoneum tumor		1	0	0	0
{Urinary syste	om)					
kidney			<50>	<50>	<4 9>	<50>
	leukemic cell infiltration		2	0	3	2
{Endocrine sys	etem)					
pituitary			<50>	<49>	<49>	<50>
	leukemic cell infiltration		1	0	1	0
adrenal			<50>	<50>	<49>	<50>
	leukemic cell infiltration		2	0	2	0
{Nervous syste	em}					
brain			<50>	<50>	<49>	<50>
	leukemic cell infiltration		1	0	2	1
spinal cord		•	<50>	<50>	<49>	<50>
	leukemic cell infiltration		1	0	2	1
{Special sense	e organs/appendage)					
еув			<50>	<50>	<49>	<50>
	leukemic cell infiltration		2	0	0	0
llarder gl			<50>	<50>	<49>	<50>
	leukemic cell infiltration		1	0	1	1
⟨a⟩ b	a : Number of animals examined at the si b : Number of animals with lesion	te				

: RAT F344/DuCrj

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

REPORT TYPE : A1 SEX : MALE

ANIMAL

320 ppm 800 ppm 2000 ppm Group Name Control 49 50 No. of Animals on Study 50 50 Findings_ Organ____ (Body cavities) mediastinum <50> <50> <49> <50> metastasis:bone tumor 0 0 1 0 < a > a : Number of animals examined at the site þ b: Number of animals with lesion (JPT150) BAIS3

APPENDIX P 2

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY

RAT: FEMALE: ALL ANIMALS

(2-YEAR STUDY)

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1

SEX : FEMALE

)rgan	Findings	Group Name No. of Animals on Study	Control 50	320 ppm 50	800 ppm 50	2000 ppm 50
n gan	r mungs			<u></u>		
Respiratory	system)					
ung			<50>	<50>	<50>	<50>
0	leukemic cell infiltration		5	4	4	7
	metastasis:uterus tumor		1	0	0	, o
	metastasis pancreas tumor		0	0	1	0
	metastasis:bone tumor		0	0	1	0
(Hematopoieti	c system)					
oone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	3	2	3
ymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	0	0	1
	metastasis pancreas tumor		0	0	1	0
pleen			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		2	0	0	0
	metastasis:pancreas tumor		0	0	1	0
(0	.)					
(Digestive sy	/stem/					
stomach	Total Control of the Control of the		<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
	metastasis:uterus tumor		1	0	0	0
	metastasis:pancreas tumor		0	0	1	0
arge intes			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	0	0
(a)	a : Number of animals examined at to b : Number of animals with lesion	he site				

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj
REPORT TYPE : A1
SEX : FEMALE

. .	P2. 12.	Group Name No. of Animals on Study	Control 50	320 ppm 50	800 ppm 50	2000 ppm 50
Organ	Findings					
(Digestive s	evston					
	, 6 6 6 11					
iver	leukemic cell infiltration		<50> 5	<50> 5	<50> 5	<50> 7
	metastasis:uterus tumor		2	0	0	0
	metastasis:pancreas tumor		0	0	1	0
Urimary sys	tem)					
			<50>	<50>	<50>	<50>
idney	leukemic cell infiltration		1	1	0	0
	metastasis:uterus tumor		1	0	0	0
Endocrine s	system)					
hyroid			< 50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
drenal	leukemic cell infiltration		<50>	<50> 2	<50> 0	<50>
	tenkemic cell intittration		1	2	U	2
[Reproductiv	re system)					
iterus			<50>	<50>	<50>	<50>
	metastasis:pancreas tumor		0	0	1	0
	metastasis:bone tumor		0	0	1	0
(Nervous sys	stem)					
rain			<50>	< 50>	<50>	<50>
	leukemic cell infiltration		0	1	0	1
	a: Number of animals examined at b: Number of animals with lesion	the site				

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

ALL ANIMALS (0-105W)

REPORT TYPE : A1 SEX : FEMALE

		Group Name No. of Animals on Study	Control 50	320 ppm 50	800 ppm . 50	2000 ppm 50
rgatı	Findings					
Vervous syste	m}					
NOT YOUR BY OVE	,					
orain	metastasis:pituitary tumor		<50> 0	<50> 0	<50>	<50> 1
	movestasts productly beams		v	•	•	_
spinal cord	leukemic cell infiltration		<50>	<50> 0	<50> 0	<50> 0
	lenkewic cell inilitration		1	V	V	V
Special sense	organs/appendage)					
eye			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
larder gl			<50>	<50>	<50>	<50>
G.	leukemic cell infiltration		1	0	0	0
{Body cavities)					•
mediastinum			<50>	<50>	<50>	<50>
.001000111010	leukemic cell infiltration		0	0	0	1
peritoneum			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		2	0	0	0
	metastasis:pancreas tumor		0	0	1	0
(a)	a : Number of animals examined at t	he site		-		
b	b : Number of animals with lesion					

APPENDIX P 3

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY

RAT: MALE: DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

ANIMAL : RAT F344/DuCrj DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX : MALE

TYPE: AL

		Group Name No. of Animals on Study	Control 10	320 ррш 6	800 ppm 12	2000 ppm 15
rgan	Findings					
Integumentar	y system/appandage)					
subcutis	metastasis:bone tumor		<10>	< 6>	<12>	<15> 0
	me tas tas is some tanoi		1	V	v	V
Respiratory	system)					
lung	1		<10>	< 6>	<12>	<15>
	leukemic cell infiltration		3	2	4	2
	metastasis:adrenal tumor		0	0	1	0
	metastasis:bone tumor		1	0	1	0
	metastasis:skim/appendage tumor		1	0	0	0
	metastasis:salivary gland tumor		0	0	1	0
(Hematopoieti	a eveten)					
	c system)					
one marrow	leukemic cell infiltration		<10> 1	< 6>	<12> 3	<15> 0
ymph node			<10>	< 6>	<12>	<15>
	leukemic cell infiltration		0	0	2	0
	metastasis:skin/appendage tumor		1	0	0	0
	metastasis:salivary gland tumor		0	0	1	0
(Digestive sy	stem)					
iver			<10>	< 6>	<12>	<15>
	leukemic cell infiltration		3	1	4	3

⁽JPT150)

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY) DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

SEX : MALE PAGE: 2

0rgan		Group Name No. of Animals on Study	Control 10	320 ppm 6	800 ppm 12	2000 ppm 15
{Digestive s	ystem}					
liver	metastasis:peritoneum tumor		<10> 1	< 6> 0	<12> 0	<15> 0
{Urinary sys	tem}					
kidney	leukemic cell infiltration		<10> 1	< 6>	<12> 3	<15> 2
{Endocrine s	ystem)					
pituitary	leukemic cell infiltration		<10> 0	< 6> 0	<12>	<15> 0
adrenal	leukemic cell infiltration		<10> 1	< 6> 0	<12> 2	<15> 0
{Nervous sys	tem)					
brain	leukemic cell infiltration		<10>	< 6> 0	<12> 2	<15> 1
spinal cord	leukemic cell infiltration		<10> 1	< 6> 0	<12> 2	<15> 1
{Special sen	se organs/appendage)					
өуө	leukemic cell infiltration		<10>	< 6> 0	<12> 0	<15> 0
Harder gl	leukemic cell infiltration		<10> 1	< 6> 0	<12> 1	<15>
< a > b	a : Number of animals examined at the s b : Number of animals with lesion	ite				

ANIMAL : RAT F344/DuCrj

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

Organ		Group Name No. of Animals on Study	Control 10	320 ppm 6	800 ppm 12	2000 ppm 15
{Body cavities	s)					
mediastinum			<10>	< 6>	<12>	<15>
	metastasis:bone tumor		0	0	1	0
< a > b	a: Number of animals examined at the s b: Number of animals with lesion	ite				
(JPT150)				A M		BAIS3

APPENDIX P 4

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY

RAT: FEMALE: DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

STUDY NO. : 0347 ANIMAL : RAT F344/DuCrj DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1

PAGE: 4 SEX : FEMALE

Organ	Findings	Group Name No. of Animals on Study	Control 13	320 ppm 10	800 ppm 8	2000 ppm 8
{Respiratory	system)					
1ung	leukemic cell infiltration		<13> 1	<10> 3	< 8> 1	< 8>
	metastasis:uterus tumor		1	0	0	0
	metastasis:pancreas tumor		0	0	1	0
	metastasis:bone tumor		0	0	1	0
{Hematopoiotie	c system)					
bone marrow	leukemic cell infiltration		<13> 0	<10> 3	< 8> 1	< 8> 3
lymph node	leukemic cell infiltration		<13> 2	<10> 0	< 8>	< 8> 1
	metastasis:pancreas tumor		0	0	1	0
spleen	metastasis:uterus tumor		<13> 2	<10> 0	< 8>	< 8>
	metastasis:pancreas tumor		0	0	1	0
{Digestive sys	stem}					
stomach	leukemic cell infiltration		<13> 0	<10> 0	< 8> 0	< 8> 1
	metastasis:uterus tumor		1	0	0	0
	metastasis:pancreas tumor		0	0	1	0
large intes	metastasis:uterus tumor		<13> 1	<10> 0	< 8>	< 8> 0
< a > b	a : Number of animals examined at the s b : Number of animals with lesion	site				

(JPT150)

BAIS3

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

ANIMAL : RAT F344/DuCrj REPORT TYPE : A1

SEX : FEMALE

APPA UND MOUTING OF TO

Digustive system	Control 320 ppm 800 ppm tudy 13 10 8	3	Control s on Study 13	Group Name No. of Animals on Study Findings	Control 320 ppm 13 10		
leukemic cell infiltration					1990 - 1000		
leukemic cell infiltration				system)			
metastasis:pancreas tumor		<		leukemic cell infiltration			
Urinary system Care Care	2 0		2	metastasis:uterus tumor	2 0	0 0	
Identify 13 10 10 10 10 10 10 10	0 0 1		0	metastasis:pancreas tumor	0 0	1 0	
leukemic cell infiltration				stem)			
Endocrine system) hyroid		<		leukemic cell infiltration			
	1 0 0		1	metastasis:uterus tumor	1 0	0 0	
leukemic cell infiltration				system}			
leukemic cell infiltration		<		leukemic cell infiltration			
terus		<		leukemic cell infiltration			
metastasis:pancreas tumor 0 0 1 metastasis:bone tumor 0 0 1				ve system}			
Nervous system)		‹		metastasis:pancreas tumor			
	0 0 1		0	metastasis:bone tumor	0 0	1 0	
rain <13> <10> < 8>				stem)			
leukemic cell infiltration 0 1 0	<13> <10> < 8> 0	<		leukemic cell infiltration			

ANIMAL

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)

DEAD AND MORIBUND ANIMALS (0-105W)

REPORT TYPE : A1 SEX : FEMALE

320 ppm 800 ppm 2000 ppm Group Name Control 10 8 No. of Animals on Study 13 Findings___ {Nervous system} <13> <10> < 8> < 8> brain 0 0 metastasis:pituitary tumor spinal cord <13> <10> < 8> < 8> leukemic cell infiltration 0 (Special sense organs/appendage) <13> <10> < 8> < 8> eye leukemic cell infiltration 1 llarder gl <13> <10> < 8> < 8> leukemic cell infiltration {Body cavities} mediastinum <13> <10> < 8> < 8> leukemic cell infiltration <13> <10> < 8> < 8> peritoneum metastasis:uterus tumor 0 metastasis:pancreas tumor < a > a : Number of animals examined at the site

b (JPT150) b: Number of animals with lesion

BAIS3

APPENDIX P 5

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY

RAT: MALE: SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0347 HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY) SACRIFICED ANIMALS (105W)

ANIMAL : RAT F344/DuCrj

REPORT TYPE : A1 SEX : MALE

Organ		Group Name No. of Animals on Study	Control 40	320 ppm 44	800 ppm 37	2000 ppm 35
		· · · · · · · · · · · · · · · · · · ·				
{Respiratory	system)					
lung	leukemic cell infiltration		<40>	<44> 2	<37> 0	<35>
	metastasis:thyroid tumor		0	1	1	0
	metastasis:vertebra tumor		0	0	1	0
{Hematopoieti	c system)					
bone marrow	leukemic cell infiltration		<40> 1	<44> 0	<37> 0	<35> 0
lymph node	leukemic cell infiltration		<40> 1	<44> 1	<37> 2	<35> 1
[Digestive sy	stem)					
liver	leukemic cell infiltration		<40> 2	<44> 1	<37> 0	<35> 2
{Urinary syst	em)					
kidney	leukemic cell infiltration		<40> 1	<44> 0	<37> 0	<35> 0
{Endocrine sy	stem}					
pituitary	leukemic cell infiltration		<40>	<43> 0	<37> 0	<35> 0
adrenal	loukemic coll infiltration		<40>	<44>	<37> 0	<35> 0
⟨ a ⟩ b	a: Number of animals examined at the si b: Number of animals with lesion	te				

ANIMAL

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

PAGE: 2

SACRIFICED ANIMALS (105W)

REPORT TYPE : A1 SEX : MALE

2000 ppm Group Name Control 320 ppm 800 ppm 35 No. of Animals on Study 40 44 37 Findings_ Organ____ (Special sense organs/appendage) <40> <44> eye <37≻ <35> leukemic cell infiltration 1 0 0 0 < a > a : Number of animals examined at the site b : Number of animals with lesion b (JPT150) BAIS3

APPENDIX P 6

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY

RAT: FEMALE: SACRIFICED ANIMALS

(2-YEAR STUDY)

ANIMAL

: RAT F344/DuCrj

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR (SUMMARY)

SACRIFICED ANIMALS (105W)

REPORT TYPE : A1 SEX : FEMALE

Group Name 320 ppm Control 800 ppm 2000 ppm No. of Animals on Study 37 40 42 42 Findings_ Organ____ {Respiratory system} lung ⟨37⟩ <40> <42> <42> leukemic cell infiltration {Hematopoietic system} bone marrow <37> <40> <42> <42> leukemic cell infiltration 1 0 1 0 lymph node <37> <40> <42> <42> leukemic cell infiltration 0 0 {Digestive system} liver <37> <40> <42> <42> leukemic cell infiltration 4 2 4 {Endocrine system} adrenal ⟨37⟩ <40≻ <42> <42> leukemic cell infiltration 0 <a>> a : Number of animals examined at the site ь b: Number of animals with lesion (JPT150)

BAIS3

APPENDIX Q 1

IDENTITY AND IMPURITY OF 2-HYDROXYETHYL ACRYLATE IN THE 2-YEAR DRINKING WATER STUDY

IDENTITY AND IMPURITY OF 2-HYDROXYETHYL ACRYLATE IN THE 2-YEAR DRINKING WATER STUDY

Test Substance : 2-Hydroxyethyl Acrylate (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : WTP4588

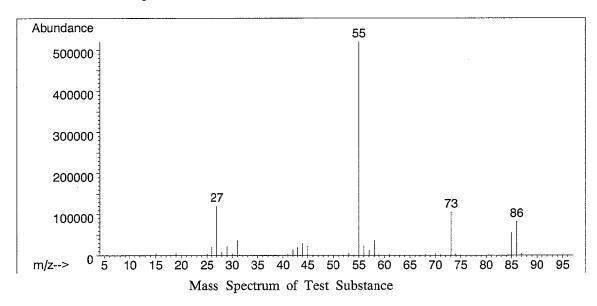
1. Spectral Data

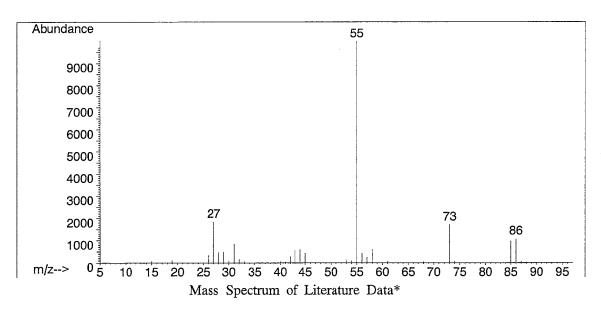
Mass Spectrometry

Instrument : Hewlett Packard 5989B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV





Results: The mass spectrum was consistent with literature spectrum.

(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.

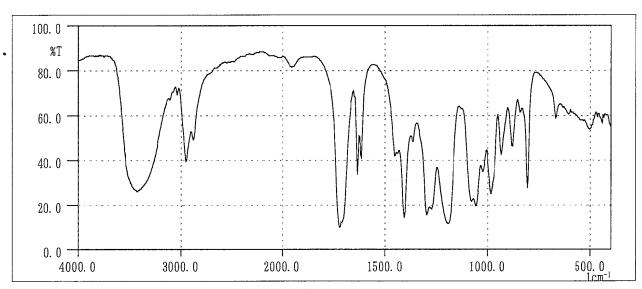
John Wiley and Sons, Inc. (U.S.), Entry Number 12762)

Infrared Spectrometry

Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2 cm⁻¹



Infrared Spectrum of Test Substance

	*
Determined Values	<u>Literature Values</u>
Wave Number (cm ⁻¹)	Wave Number (cm ⁻¹)
650~ 680	650~ 680
770~ 850	770~ 850
850~ 910	850~ 910
910~ 950	910~ 950
950~1010	950~1010
1010~1140	1010~1140
$1140 \sim 1250$	$1140 \sim 1250$
1250~1350	1250~1350
1350~1550	1350~1550
1580~1660	1580~1660
1660~1850	$1660 \sim 1850$
1920~2000	1920~2000
2750~3020	2750~3020
3060~3700	3060~3700

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

2. Impurity

)

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : FFAP (0.53 mm ϕ × 30 m)

Column Temperature : 180 ° C

Flow Rate : 3 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Sample Name	Peak No.	Area (%)	Peak Name
Test Substance	1	0.965	Acrylic Acid
	2	96.466	2-Hydroxyethyl Acrylate
	3	2.514	Material which cannot be identified
	. 4	0.055	p-Methoxyphenol

Results: Gas chromatography indicated one major peak (peak No.2) and three impurities. It was identified only by comparing gas chromatograph with that of acrylic acid (peak No.1), material which cannot be identified (peak No.3) and p-methoxyphenol (peak No.4) in the 2-hydroxyethyl acrylate, the amount in the test substance were 0.965%, 2.514% and 0.055%.

3. Conclusions: The test substance was identified as 2-hydroxyethyl acrylate by the mass spectrum and the infrared spectrum. Gas chromatography indicated one major peak (peak No.2) and three impurities. It was identified only by comparing gas chromatograph with that of acrylic acid, material which cannot be identified and p-methoxyphenol, the amount in the test substance were 0.965%, 2.514% and 0.055%.

B. Lot No.

: WTH5799

1. Spectral Data

Mass Spectrometry

Instrument

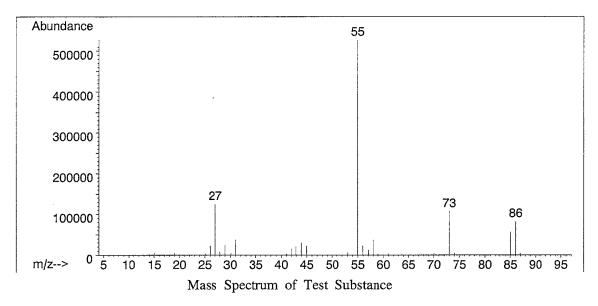
: Hewlett Packard 5989B Mass Spectrometer

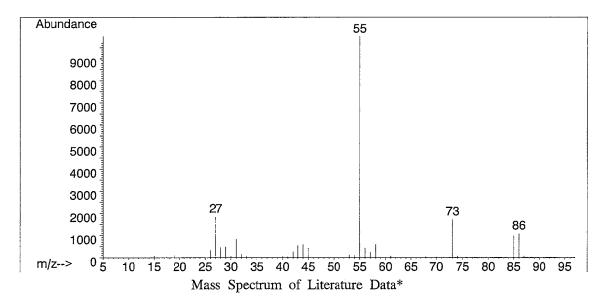
Ionization

: EI (Electron Ionization)

Ionization Voltage

: 70eV





Results: The mass spectrum was consistent with literature spectrum.

(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.

John Wiley and Sons, Inc. (U.S.), Entry Number 12762)

Infrared Spectrometry

Instrument

: Shimadzu FTIR-8200PC Infrared Spectrometer

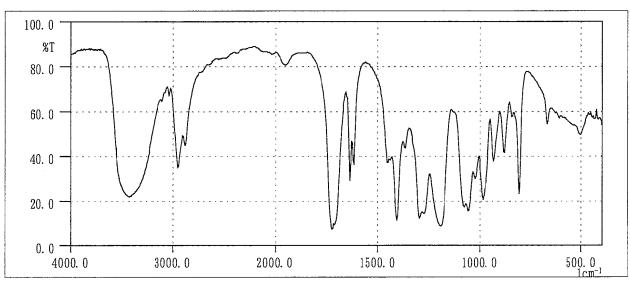
Cell

)

: KBr Liquid Cell

Resolution

: 2 cm⁻¹



Infrared Spectrum of Test Substance

Determined Values	Literature Values*
Wave Number (cm ⁻¹)	Wave Number (cm ⁻¹)
650~ 680	650~ 680
770~ 850	770~ 850
850~ 910	850~ 910
910~ 950	910~ 950
950~1010	950~1010
1010~1140	1010~1140
1140~1250	$1140 \sim 1250$
$1250 \sim 1350$	1250~1350
1350~1550	1350~1550
1580~1660	1580~1660
1660~1850	1660~1850
1920~2000	1920~2000
2750~3020	2750~3020
3060~3700	$3060\sim3700$

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

2. Impurity

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Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : FFAP (0.53 mm $\phi \times 30$ m)

Column Temperature : 180 ° C

Flow Rate : 3 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Sample Name	Peak No.	Area	Peak Name
		(%)	
Test Substance	1	0.855	Acrylic Acid
	2	96.295	2-Hydroxyethyl Acrylate
	3	2.794	Material which cannot be identified
	4	0.056	p-Methoxyphenol

Results: Gas chromatography indicated one major peak (peak No.2) and three impurities. It was identified only by comparing gas chromatograph with that of acrylic acid (peak No.1), material which cannot be identified (peak No.3) and p-methoxyphenol (peak No.4) in the 2-hydroxyethyl acrylate, the amount in the test substance were 0.855%, 2.794% and 0.056%.

3. Conclusions: The test substance was identified as 2-hydroxyethyl acrylate by the mass spectrum and the infrared spectrum. Gas chromatography indicated one major peak (peak No.2) and three impurities. It was identified only by comparing gas chromatograph with that of acrylic acid, material which cannot be identified and p-methoxyphenol, the amount in the test substance were 0.855%, 2.794% and 0.056%.

C. Lot No.

: CKQ4839

1. Spectral Data

Mass Spectrometry

Instrument

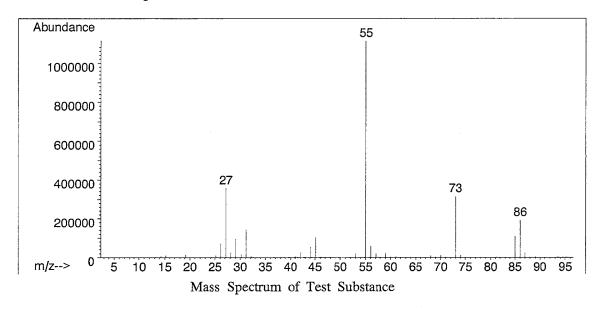
: Hewlett Packard 5989B Mass Spectrometer

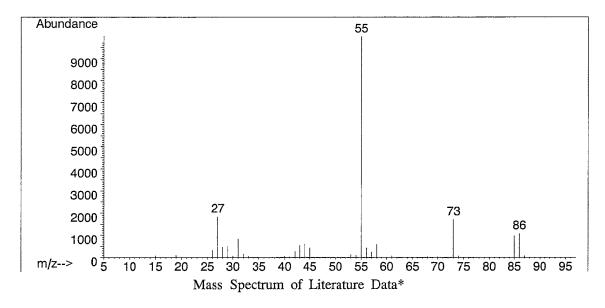
Ionization

: EI (Electron Ionization)

Ionization Voltage

: 70eV





Results: The mass spectrum was consistent with literature spectrum.

(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.

John Wiley and Sons, Inc. (U.S.), Entry Number 12762)

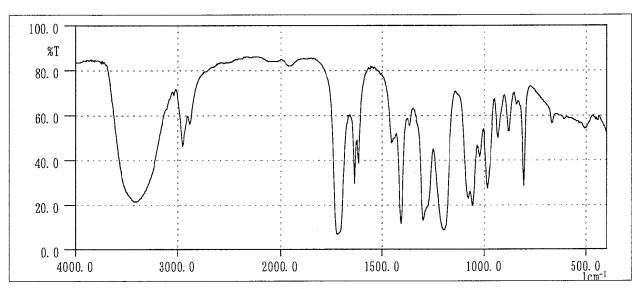
Infrared Spectrometry

)

Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2 cm⁻¹



Infrared Spectrum of Test Substance

Determined Values	Literature Values*
Wave Number (cm ⁻¹)	Wave Number (cm ⁻¹)
650~ 680	650~ 680
770~ 850	770~ 850
850~ 910	850~ 910
910~ 950	910~ 950
950~1010	950~1010
1010~1140	1010~1140
1140~1250	$1140 \sim 1250$
$1250 \sim 1350$	$1250\sim 1350$
1350~1550	1350~1550
1580~1660	1580~1660
1660~1850	$1660 \sim 1850$
1920~2000	$1920\sim\!2000$
2750~3020	2750~3020
3060~3700	3060~3700

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

2. Impurity

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : FFAP (0.53 mm ϕ × 30 m)

Column Temperature : 180 ° C

Flow Rate : 3 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Sample Name	Peak No.	Area	Peak Name
		(%)	
Test Substance	1	0.789	Acrylic Acid
	2	97.556	2-Hydroxyethyl Acrylate
	3	1.602	Material which cannot be identified
	4	0.053	p-Methoxyphenol

Results: Gas chromatography indicated one major peak (peak No.2) and three impurities. It was identified only by comparing gas chromatograph with that of acrylic acid (peak No.1), material which cannot be identified (peak No.3) and p-methoxyphenol (peak No.4) in the 2-hydroxyethyl acrylate, the amount in the test substance were 0.789%, 1.602% and 0.053%.

3. Conclusions: The test substance was identified as 2-hydroxyethyl acrylate by the mass spectrum and the infrared spectrum. Gas chromatography indicated one major peak (peak No.2) and three impurities. It was identified only by comparing gas chromatograph with that of acrylic acid, material which cannot be identified and p-methoxyphenol, the amount in the test substance were 0.789%, 1.602% and 0.053%.

APPENDIX Q 2

STABILITY OF 2-HYDROXYETHYL ACRYLATE
IN THE 2-YEAR DRINKING WATER STUDY

STABILITY OF 2-HYDROXYETHYL ACRYLATE IN THE 2-YEAR DRINKING WATER STUDY

Test Substance : 2-Hydroxyethyl Acrylate (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : WTP4588

1. Sample : This lot was used from 1997.11.11 to 1998.3.17. Test substance was stored

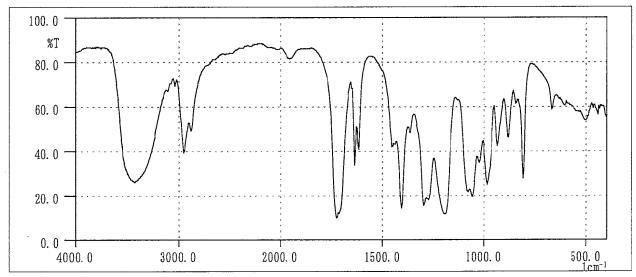
in a dark place at room temperature.

2. Infrared Spectrometry

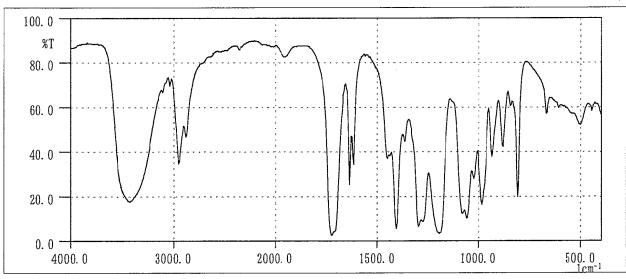
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2 cm⁻¹



Infrared Spectrum of Test Substance (date analyzed: 1997.10.27)



Infrared Spectrum of Test Substance (date analyzed: 1998.03.18)

Results: The results of infrared spectrum did not change before and after the period.

3. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : FFAP $(0.53 \text{ mm} \phi \times 30 \text{ m})$

Column Temperature : 180 °C

Flow Rate : 3 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 µL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1997.10.24	1	2.487	0.965
	2	3.151	96.466
	3	7.018	2.514
	4	18.977	0.055
1998.03.18	1	2.509	0.990
	2	3.173	96.436
	3	7.084	2.520
	4	19.197	0.054

Results: Gas chromatography indicated one major peak (peak No.2) and three impurities (peaks No.1, No.3 and No.4 < 4% of total area) analyzed on 1997.10.24 and one major peak (peak No.2) and three impurities (peaks No.1, No.3 and No.4 < 4% of total area) analyzed on 1998.3.18. No new trace impurity peak in the test substance analyzed on 1998.3.18 was detected.

4. Conclusions: The test substance was stable for about 5 months in a dark place at room temperature.

B. Lot No.

: WTH5799

1. Sample

: This lot was used from 1998.3.17 to 1999.9.14. Test substance was stored

in a dark place at room temperature.

2. Infrared Spectrometry

Instrument

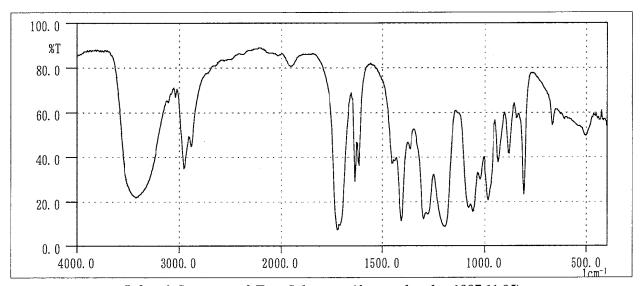
: Shimadzu FTIR-8200PC Infrared Spectrometer

Cell

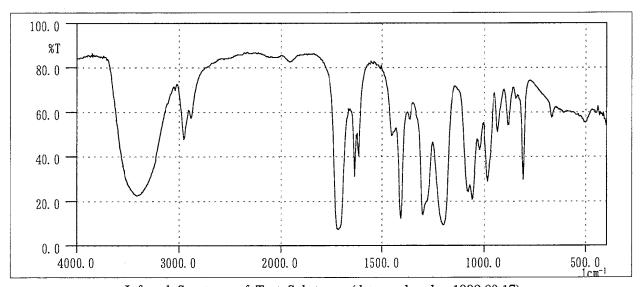
: KBr Liquid Cell

Resolution

: 2 cm⁻¹



Infrared Spectrum of Test Substance (date analyzed: 1997.11.05)



Infrared Spectrum of Test Substance (date analyzed: 1999.09.17)

Results: The results of infrared spectrum did not change before and after the period.

3. Gas Chromatography

Instrument

: Hewlett Packard 5890A Gas Chromatograph

Column

: FFAP (0.53 mm ϕ × 30 m)

Column Temperature : 180 ° C

Flow Rate

: 3 mL/min

Detector

: FID (Flame Ionization Detector)

Injection Volume

: 1 µL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1997.11.05	1	2.595	0.855
	2	3.287	96.295
	3	7.321	2.794
	4	19.812	0.056
1999.09.14	1	2.465	0.742
	2	3.114	96.456
	3	6.960	2.748
	4	18.895	0.055

Results: Gas chromatography indicated one major peak (peak No.2) and three impurities (peaks No.1, No.3 and No.4 < 4% of total area) analyzed on 1997.11.5 and one major peak (peak No.2) and three impurities (peaks No.1, No.3 and No.4 < 4% of total area) analyzed on 1999.9.14. No new trace impurity peak in the test substance analyzed on 1999.9.14 was detected.

4. Conclusions: The test substance was stable for about 22 months in a dark place at room temperature.

C. Lot No. : CKQ4839

1. Sample : This lot was used from 1999.9.14 to 1999.11.16. Test substance was stored

in a dark place at room temperature.

2. Infrared Spectrometry

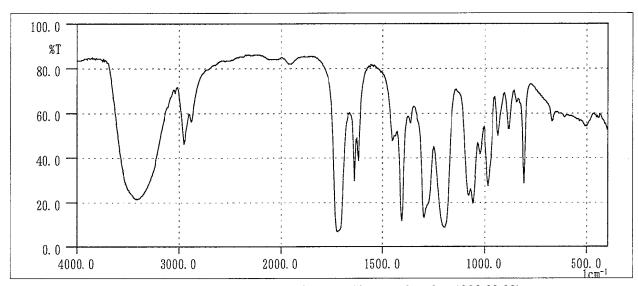
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

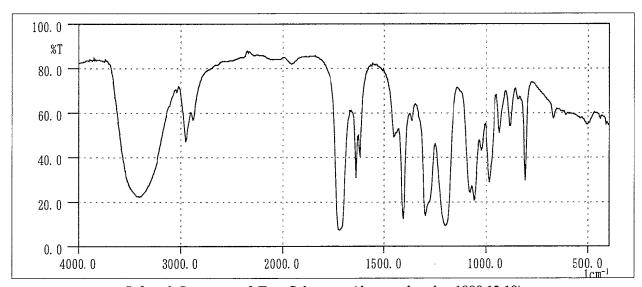
Resolution : 2 cm⁻¹

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Infrared Spectrum of Test Substance (date analyzed: 1999.09.09)



Infrared Spectrum of Test Substance (date analyzed: 1999.12.10)

Results: The results of infrared spectrum did not change before and after the period.

3. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : FFAP (0.53 mm ϕ × 30 m)

Column Temperature : 180 ° C

Flow Rate : 3 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 µL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1999.09.13	1	2.659	0.789
	2	3.368	97.556
	3	7.512	1.602
	4	20.444	0.053
1999.12.10	1	2.667	0.787
	2	3.378	97.626
	3	7.538	1.534
	4	20.519	0.054

Results: Gas chromatography indicated one major peak (peak No.2) and three impurities (peaks No.1, No.3 and No.4 < 3% of total area) analyzed on 1999.9.13 and one major peak (peak No.2) and three impurities (peaks No.1, No.3 and No.4 < 3% of total area) analyzed on 1999.12.10. No new trace impurity peak in the test substance analyzed on 1999.12.10 was detected.

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

APPENDIX Q 3

CONCENTRATION OF 2-HYDROXYETHYL ACRYLATE IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

CONCENTRATION OF 2-HYDROXYETHYL ACRYLATE IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

Target Concentration				
Date Analyzed	320ª	800	2000	
1997.11.11	312 (97.5) ^b	797 (99.6)	2070 (104)	
1998.02.02	325 (102)	829 (104)	2120 (106)	
1998.04.28	313 (97.8)	802 (100)	1970 (98.5)	
1998.07.21	318 (99.4)	783 (97.9)	1940 (97.0)	
1998.10.13	324 (101)	834 (104)	2000 (100)	
1999.01.05	318 (99.4)	753 (94.1)	1980 (99.0)	
1999.03.30	319 (99.7)	815 (102)	2010 (101)	
1999.06.22	332 (104)	821 (103)	2050 (103)	
1999.09.14	321 (100)	810 (101)	2100 (105)	

^a ppm ^b %

: The samples were analyzed by gas chromatography. Analytical Method

: Hewlett Packard 5890A Gas Chromatograph Instrument

Column : FFAP (0.53 mm ϕ × 30 m)

: 180 °C Column Temperature Flow Rate : 3 mL/min

: FID (Flame Ionization Detector) Detector

Injection Volume : 1 μL

APPENDIX Q 4

STABILITY OF 2-HYDROXYETHYL ACRYLATE IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

STABILITY OF 2-HYDROXYETHYL ACRYLATE IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

	Target Concentration	
Date Analyzed	320 ^a	2000
1997.10.27	315 (100) ^b	2000 (100)
1997.10.31°	316 (100)	2020 (101)
1997.11.04°	320 (102)	2000 (100)
1997.11.07°	314 (99.7)	1980 (99.0)
	1997.10.27 1997.10.31° 1997.11.04°	Date Analyzed 320 ^a 1997.10.27 315 (100) ^b 1997.10.31 ^c 316 (100) 1997.11.04 ^c 320 (102)

^a ppm

Analytical Method : The samples were analyzed by gas chromatography.

Instrument : Hewle

: Hewlett Packard 5890A Gas Chromatograph

Column : FFAP (0.53 mm ϕ × 30 m)

Column Temperature: 180 °C Flow Rate : 3 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

^b % (Percentage was based on the concentration on date of preparation.)

^c Animal room samples

APPENDIX R 1

METHODS FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR DRINKING WATER STUDY OF 2-HYDROXYETHYL ACRYLATE

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 2-YEAR DRINKING WATER STUDY OF 2-HYDROXYETHYL ACRYLATE

Item	Method
Hematology	
Red blood cell (RBC)	Light scattering method 1)
Hemoglobin (Hgb)	Cyanmethemoglobin method 1)
Hematocrit (Hct)	Calculated as RBC×MCV/10 1)
Mean corpuscular volume (MCV)	Light scattering method 1)
Mean corpuscular hemoglobin (MCH)	Calculated as Hgb/RBC×10 1)
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct×100 1)
Platelet	Light scattering method 1)
White blood cell (WBC)	Light scattering method 1)
Differential WBC	Pattern recognition method 2
	(Wright staining)
Biochemistry	
Total protein (TP)	Biuret method 3)
Albumin (Alb)	BCG method 3)
A/G ratio	Calculated as Alb/(TP-Alb) 3)
T-bilirubin	Alkaline azobilirubin method 3)
Glucose	GlcK·G-6-PDH method 3)
T-cholesterol	CE·COD·POD method 3)
Triglyceride	LPL·GK·GPO·POD method 3)
Phospholipid	PLD·ChOD·POD method 31
Glutamic oxaloacetic transaminase (GOT)	JSCC method 3)
Glutamic pyruvic transaminase (GPT)	JSCC method 3)
Lactate dehydrogenase (LDH)	SFBC method 3)
Alkaline phosphatase (ALP)	GSCC method 3)
γ -Glutamyl transpeptidase (γ -GTP)	L- γ -Glutamyl-p-nitroanilide method ³⁾
Creatine phosphokinase (CPK)	JSCC method 3)
Urea nitrogen	Urease · GLDH method 3)
Creatinine	Jaffe method 3)
Sodium	Ion selective electrode method 3)
Potassium	Ion selective electrode method
Chloride	Ion selective electrode method 3)
Calcium	OCPC method 3)
Inorganic phosphorus	PNP·XOD·POD method 3)
Urinalysis	
pH,Protein,Glucose,Ketone body,Bilirubin,Occult blood,	Urinalysis reagent paper method 4)
Urobilinogen	

- 1) Automatic blood cell analyzer (Technicon $H \cdot 1$: Bayer Corporation)
- 2) Automatic blood cell differential analyzer (MICROX HEG-120NA: OMRON Corporation)
- 3) Automatic analyzer (Hitachi 7070 : Hitachi, Ltd.)
- 4) Ames reagent strips for urinalysis (Multistix: Bayer Corporation)

APPENDIX R 2

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR DRINKING WATER STUDY OF 2-HYDROXYETHYL ACRYLATE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR DRINKING WATER STUDY OF 2-HYDROXYETHYL ACRYLATE

Item	Unit	Decimal place
Hematology		
Red blood cell (RBC)	$\times 10^6/\mu L$	2
Hemoglobin	g/dL	1
Hematocrit	%	1
Mean corpuscular volume (MCV)	fL	1
Mean corpuscular hemoglobin (MCH)	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	g/dL	1
Platelet	$\times 10^3/\mu L$	0
White blood cell (WBC)	$\times 10^3/\mu L$	2
Differential WBC	%	0
Biochemistry		
Total protein	g/dL	1
Albumin	g/dL	1
A/G ratio	_	1
T-bilirubin	mg/dL	2
Glucose	mg/dL	0
T-cholesterol	mg/dL	0
Triglyceride	mg/dL	0
Phospholipid	mg/dL	0
Glutamic oxaloacetic transaminase (GOT)	IU/L	0
Glutamic pyruvic transaminase (GPT)	IU/L	0
Lactate dehydrogenase (LDH)	IU/L	0
Alkaline phosphatase (ALP)	IU/L	0
γ -Glutamyl transpeptidase (γ -GTP)	IU/L	0
Creatine phosphokinase (CPK)	IU/L	0
Urea nitrogen	mg/dL	1
Creatinine	mg/dL	1
Sodium	mEq/L	0
Potassium	mEq/L	1
Chloride	mEq/L	0
Calcium	mg/dL	1
Inorganic phosphorus	mg/dL	1