1 - ブロモブタンのラットを用いた
吸入による2週間毒性試験報告書

試験番号：0480

TABLES

TABLES

TABLES (CONTINUED)

TABLE 1
SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Week-Day on Study	Control Av.Wt.	Control No.of Surviv.	500ppm Av.Wt.	500ppm % of cont.	500ppm No.of Surviv.	1000ppm Av.Wt.	1000ppm % of cont.	1000ppm No.of Surviv.	2000ppm Av.Wt.	2000ppm % of cont.	2000ppm No.of Surviv.	4000ppm Av.Wt.	4000ppm % of cont.	4000ppm No.of Surviv.	8000ppm Av.Wt.	8000ppm % of cont.	8000ppm No.of Surviv.
	< 5>		< 5>			< 5>			< 5>			< 5>			< 5>			
0-0	118 (5)	5/ 5	119 (5)	101	5/ 5	119 (5)	101	5/ 5	119 (5)	101	5/ 5	119 (5)	101	5/ 5	119 (5)	101	5/ 5
1-2	125 (5)	5/ 5	121 (5)	97	5/ 5	120 (5)	96	5/ 5	115 (5)	92	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
1-4	129 (5)	5/ 5	126 (5)	98	5/ 5	123 (5)	95	5/ 5	95 (5)	74	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
1-7	137 (5)	5/ 5	131 (5)	96	5/ 5	128 (5)	93	5/ 5	82 (4)	60	4/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
2-3	144 (5)	5/ 5	140 (5)	97	5/ 5	133 (5)	92	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
2-7	156 (5)	5/ 5	152 (5)	97	5/ 5	142 (5)	91	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5

< > : No.of effective animals, ( ) : No.of measured animals Av.Wt. : Average body weight (Unit : g).

TABLE 2
SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Week-Day on Study	Control Av.Wt.	Control No.of Surviv.	500ppm Av.Wt.	500ppm % of cont.	500ppm No.of Surviv.	1000ppm Av.Wt.	1000ppm % of cont.	1000ppm No.of Surviv.	2000ppm Av.Wt.	2000ppm % of cont.	2000ppm No.of Surviv.	4000ppm Av.Wt.	4000ppm % of cont.	4000ppm No.of Surviv.	8000ppm Av.Wt.	8000ppm % of cont.	8000ppm No.of Surviv.
	< 5>		< 5>			< 5>			< 5>			< 5>			< 5>			
0-0	95 (5)	5/ 5	95 (5)	100	5/ 5	95 (5)	100	5/ 5	95 (5)	100	5/ 5	95 (5)	100	5/ 5	95 (5)	100	5/ 5
1-2	99 (5)	5/ 5	97 (5)	98	5/ 5	96 (5)	97	5/ 5	95 (5)	96	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
1-4	102 (5)	5/ 5	98 (5)	96	5/ 5	97 (5)	95	5/ 5	92 (5)	90	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
1-7	106 (5)	5/ 5	102 (5)	96	5/ 5	101 (5)	95	5/ 5	94 (5)	89	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
2-3	109 (5)	5/ 5	105 (5)	96	5/ 5	105 (5)	96	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
2-7	115 (5)	5/ 5	109 (5)	95	5/ 5	111 (5)	97	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5

< > : No.of effective animals, ( ) : No.of measured animals Av.Wt. : Average body weight (Unit : g).

TABLE 3 FOOD CONSUMPTION CHANGES OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Week-Day on Study	Control Av.Fc.	Control No.of Surviv.	500ppm Av.Fc.	500ppm % of cont.	500ppm No.of Surviv.	1000ppm Av.Fc.	1000ppm % of cont.	1000ppm No.of Surviv.	2000ppm Av.Fc.	2000ppm % of cont.	2000ppm No.of Surviv.	4000ppm Av.Fc.	4000ppm % of cont.	4000ppm No.of Surviv.	8000ppm Av.Fc.	8000ppm % of cont.	8000ppm No.of Surviv.
	< 5>		< 5>			< 5>			< 5>			< 5>			< 5>			
1-7	13.8 (5)	5/ 5	11.7 (5)	85	5/ 5	12.0 (5)	87	5/ 5	3.7 (4)	27	4/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
2-7	13.3 (5)	5/ 5	13.7 (5)	103	5/ 5	14.0 (5)	105	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5

< > : No.of effective animals, ( ) : No.of measured animals Av.Fc. : Average food consumption (Unit : g).

TABLE 4 FOOD CONSUMPTION CHANGES OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Week-Day on Study	Control Av.Fc.	Control No.of Surviv.	500ppm Av.Fc.	500ppm % of cont.	500ppm No.of Surviv.	1000ppm Av.Fc.	1000ppm % of cont.	1000ppm No.of Surviv.	2000ppm Av.Fc.	2000ppm % of cont.	2000ppm No.of Surviv.	4000ppm Av.Fc.	4000ppm % of cont.	4000ppm No.of Surviv.	8000ppm Av.Fc.	8000ppm % of cont.	8000ppm No.of Surviv.
	< 5>		< 5>			< 5>			< 5>			< 5>			< 5>			
1-7	10.5 (5)	5/ 5	10.0 (5)	95	5/ 5	10.1 (5)	96	5/ 5	8.8 (5)	84	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5
2-7	10.0 (5)	5/ 5	9.9 (5)	99	5/ 5	11.2 (5)	112	5/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5	- (-)	-	0/ 5

< > : No.of effective animals, ( ) : No.of measured animals Av.Fc. : Average food consumption (Unit : g).

TABLE 5 HEMATOLOGY OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Group Name	Control	500 ppm	1000 ppm	2000 ppm	4000 ppm	8000 ppm
No. of examined animals	5	5	5	0	0	0
RED BLOOD CELL ($10^6/\mu$ L)	8.89 ± 0.17	8.97 ± 0.20	9.21 ± 0.15 *	—	—	—
HEMATOCRIT (%)	45.5 ± 0.9	46.2 ± 1.0	47.7 ± 0.8 **	—	—	—
MCHC (g/dL)	34.8 ± 0.3	34.2 ± 0.2 **	34.2 ± 0.2 **	—	—	—
PLATELET ($10^3/\mu$ L)	805 ± 69	973 ± 55 **	936 ± 35 **	—	—	—
APTT (sec)	22.2 ± 0.4	21.3 ± 1.5	19.5 ± 0.5 **	—	—	—
WBC ($10^3/\mu$ L)	3.43 ± 1.02	5.69 ± 1.13 *	5.66 ± 1.12 *	—	—	—

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 6 HEMATOLOGY OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Group Name	Control	500 ppm	1000 ppm	2000 ppm	4000 ppm	8000 ppm
No. of examined animals	5	5	5	0	0	0
RETICULOCYTE (%)	1.4 ± 0.2	1.6 ± 0.2	2.0 ± 0.1 **	—	—	—

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 7 BIOCHEMISTRY OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Group Name	Control	500 ppm		1000 ppm		2000 ppm	4000 ppm	8000 ppm
No. of examined animals	5	5		5		0	0	0
Total protein(g/dL)	5.7 ± 0.2	6.0 ± 0.1	**	6.2 ± 0.1	**	—	—	—
Albumin (g/dL)	3.4 ± 0.1	3.5 ± 0.1		3.7 ± 0.2	*	—	—	—
T-cholesterol(mg/dL)	49 ± 3	36 ± 4	**	32 ± 2	**	—	—	—
Triglyceride(mg/dL)	33 ± 11	14 ± 6	*	13 ± 2	*	—	—	—
Phospholipid (mg/dL)	99 ± 7	77 ± 6	**	78 ± 2	**	—	—	—
GOT(IU/L)	57 ± 9	66 ± 2	*	64 ± 4		—	—	—
ALP(IU/L)	677 ± 40	569 ± 25	**	517 ± 44	**	—	—	—
CPK(IU/L)	255 ± 47	188 ± 16	*	153 ± 27	**	—	—	—
Urea nitrogen(mg/dL)	16.5 ± 1.0	13.7 ± 1.4	*	11.5 ± 1.6	**	—	—	—
Sodium(mEq/L)	141 ± 1	141 ± 1		139 ± 1	*	—	—	—
Chloride (mEq/L)	103 ± 1	105 ± 1	**	107 ± 0	**	—	—	—
Calcium(mg/dL)	10.1 ± 0.2	10.3 ± 0.1	*	10.4 ± 0.1	**	—	—	—

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 8 BIOCHEMISTRY OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Group Name	Control	500 ppm		1000 ppm		2000 ppm	4000 ppm	8000 ppm
No. of examined animals	5	5		5		0	0	0
Glucose(mg/dL)	138 ± 8	134 ± 8		161 ± 3	**	—	—	—
T-cholesterol(mg/dL)	67 ± 5	60 ± 4		56 ± 4	**	—	—	—
GOT(IU/L)	75 ± 2	70 ± 5		69 ± 4	*	—	—	—
GPT(IU/L)	32 ± 3	24 ± 1	**	27 ± 1	**	—	—	—
ALP(IU/L)	571 ± 31	479 ± 26	**	478 ± 31	**	—	—	—
CPK(IU/L)	258 ± 42	214 ± 45		158 ± 29	**	—	—	—
Urea nitrogen(mg/dL)	18.3 ± 1.6	14.0 ± 0.9	**	11.2 ± 1.0	**	—	—	—
Sodium(mEq/L)	139 ± 1	138 ± 1		137 ± 1	*	—	—	—
Chloride (mEq/L)	105 ± 1	106 ± 1		107 ± 1	**	—	—	—
Calcium(mg/dL)	9.6 ± 0.2	9.8 ± 0.2		10.1 ± 0.3	*	—	—	—

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 9 ORGAN WEIGHTS OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Group Name	Control	500 ppm		1000 ppm		2000 ppm	4000 ppm	8000 ppm
No. of examined animals	5	5		5		0	0	0
Body weight (g)	140 ± 10	137 ± 5		127 ± 4	*	—	—	—
Thymus (g)	0.246 ± 0.035	0.238 ± 0.019		0.195 ± 0.034	*	—	—	—
Thymus (%)	0.175 ± 0.024	0.173 ± 0.016		0.154 ± 0.028		—	—	—
Adrenals (g)	0.039 ± 0.003	0.043 ± 0.005		0.045 ± 0.007		—	—	—
Adrenals (%)	0.028 ± 0.003	0.031 ± 0.003		0.035 ± 0.006	*	—	—	—
Heart (g)	0.578 ± 0.031	0.616 ± 0.020		0.618 ± 0.019	*	—	—	—
Heart (%)	0.413 ± 0.019	0.448 ± 0.006	**	0.488 ± 0.018	**	—	—	—
Lungs (g)	0.656 ± 0.037	0.697 ± 0.025		0.682 ± 0.023		—	—	—
Lungs (%)	0.469 ± 0.044	0.508 ± 0.022		0.538 ± 0.014	**	—	—	—
Kidneys (g)	1.138 ± 0.085	1.296 ± 0.066	**	1.314 ± 0.052	**	—	—	—
Kidneys (%)	0.811 ± 0.023	0.943 ± 0.024	**	1.038 ± 0.019	**	—	—	—
Spleen (g)	0.305 ± 0.032	0.301 ± 0.015		0.261 ± 0.015	*	—	—	—
Spleen (%)	0.217 ± 0.009	0.219 ± 0.005		0.206 ± 0.007		—	—	—
Liver (g)	4.089 ± 0.299	4.865 ± 0.235	**	5.177 ± 0.241	**	—	—	—
Liver (%)	2.913 ± 0.077	3.540 ± 0.085	**	4.088 ± 0.081	**	—	—	—
Brain (g)	1.699 ± 0.035	1.688 ± 0.027		1.606 ± 0.018	**	—	—	—
Brain (%)	1.217 ± 0.106	1.230 ± 0.057		1.270 ± 0.045		—	—	—

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE10 ORGAN WEIGHTS OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE

Group Name	Control	500 ppm	1000 ppm	2000 ppm	4000 ppm	8000 ppm
No. of examined animals	5	5	5	0	0	0
Body weight (g)	103 ± 4	98 ± 3	99 ± 4	—	—	—
Thymus (g)	0.262 ± 0.014	0.208 ± 0.011 **	0.166 ± 0.009 **	—	—	—
Thymus (%)	0.253 ± 0.008	0.212 ± 0.016 **	0.168 ± 0.012 **	—	—	—
Adrenals (g)	0.043 ± 0.002	0.047 ± 0.004	0.054 ± 0.005 **	—	—	—
Adrenals (%)	0.042 ± 0.002	0.048 ± 0.003 *	0.055 ± 0.006 **	—	—	—
Heart (g)	0.453 ± 0.020	0.449 ± 0.006	0.491 ± 0.019 **	—	—	—
Heart (%)	0.439 ± 0.030	0.457 ± 0.014	0.496 ± 0.022 **	—	—	—
Kidneys (g)	0.869 ± 0.041	0.974 ± 0.013 **	1.028 ± 0.046 **	—	—	—
Kidneys (%)	0.841 ± 0.014	0.993 ± 0.032 **	1.036 ± 0.017 **	—	—	—
Spleen (g)	0.251 ± 0.015	0.239 ± 0.009	0.213 ± 0.013 **	—	—	—
Spleen (%)	0.243 ± 0.008	0.243 ± 0.011	0.215 ± 0.016 **	—	—	—
Liver (g)	3.089 ± 0.181	3.582 ± 0.133 **	4.242 ± 0.190 **	—	—	—
Liver (%)	2.987 ± 0.132	3.647 ± 0.044	4.276 ± 0.043 **	—	—	—

Mean ± S.D.

*) Significant difference, $p<0.05$ (Test of Dunnett)

**) Significant difference, $p<0.01$ (Test of Dunnett)

TABLE 11 INCIDENCES OF SELECTED LESIONS OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE (DEAD AND MORIBUND ANIMALS)

Group Name	Control				500ppm				1000ppm				2000ppm				4000ppm				8000ppm			
No. of Animals on Study	0				0				0				5				5				5			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
nasal cavity													< 5>				< 5>				< 5>			
disarrangement:olfactory epithelium	—				—				—				4	0	0	0	0	0	0	0	0	0	0	0
atrophy:olfactory epithelium	—				—				—				1	1	3	0	0	0	0	0	0	0	0	0
necrosis:olfactory epithelium	—				—				—				0	4	0	0	0	0	5	0	0	0	0	0
lung													< 5>				< 5>				< 5>			
congestion	—				—				—				0	1	0	0	0	0	0	0	2	3	0	0
hemorrhage	—				—				—				0	0	0	0	0	0	0	0	2	0	0	0
edema: alveolus	—				—				—				0	1	0	0	0	4	1	0	5	0	0	0
edema:perivascular	—				—				—				4	1	0	0	0	5	0	0	0	5	0	0
bone marrow													< 5>				< 5>				< 5>			
congestion	—				—				—				0	4	0	0	0	0	0	0	0	0	0	0
thymus													< 5>				< 5>				< 5>			
atrophy	—				—				—				1	0	4	0	0	0	0	0	0	0	0	0
congestion	—				—				—				3	0	0	0	0	0	0	0	0	0	0	0
spleen													< 5>				< 5>				< 5>			
atrophy	—				—				—				1	4	0	0	0	0	0	0	0	0	0	0
heart													< 5>				< 5>				< 5>			
hemorrhage	—				—				—				0	0	0	0	3	2	0	0	0	0	0	0
stomach													< 5>				< 5>				< 5>			
erosion:forestomach	—				—				—				1	0	0	0	0	0	0	0	0	0	0	0
liver													< 5>				< 5>				< 5>			
necrosis:central	—				—				—				0	0	0	0	1	0	4	0	0	0	0	0

TABLE 11 INCIDENCES OF SELECTED LESIONS OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE (DEAD AND MORIBUND ANIMALS) (CONTINUE)

Group Name	Control				500ppm				1000ppm				2000ppm				4000ppm				8000ppm			
No. of Animals on Study	0				0				0				5				5				5			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
adrenal gland													< 5>				< 5>				< 5>			
hemorrhage			—				—				—		0	0	0	0	0	1	0	0	0	0	0	0
testis													< 5>				< 5>				< 5>			
germ cell necrosis			—				—				—		1	4	0	0	0	0	0	0	0	0	0	0
epididymis													< 5>				< 5>				< 5>			
decreased:sperma			—				—				—		0	1	4	0	0	0	0	0	0	0	0	0
debris of spermatic elements			—				—				—		2	3	0	0	0	0	0	0	0	0	0	0
brain													< 5>				< 5>				< 5>			
degeneration:granular cell			—				—				—		0	2	3	0	0	0	0	0	0	0	0	0

Grade 1: Slight 2 : Moderate 3: Marked 4 :Severe
< > : Number of animals examined at the site
— : All animals survived at the terminal necropsy

TABLE 12 INCIDENCES OF SELECTED LESIONS OF MALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE (SACRIFICED ANIMALS)

Group Name	Control				500ppm				1000ppm				2000ppm				4000ppm				8000ppm			
No. of Animals on Study	5				5				5				0				0				0			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
nasal cavity			<5>				<5>				<5>													
disarrangement:olfactory epithelium	0	0	0	0	4	0	0	0	5	0	0	0	—				—				—			
atrophy:olfactory epithelium	0	0	0	0	0	0	0	0	1	0	0	0	—				—				—			

Grade 1: Slight 2 : Moderate 3: Marked 4 :Severe
< > : Number of animals examined at the site
— : All animals died before the terminal necropsy

TABLE 13 INCIDENCES OF SELECTED LESIONS OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE (DEAD AND MORIBUND ANIMALS)

Group Name	Control				500ppm				1000ppm				2000ppm				4000ppm				8000ppm			
No. of Animals on Study	0				0				0				5				5				5			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
nasal cavity														< 5>				< 5>				< 5>		
thrombus		−				−				−			0	0	1	0	0	0	0	0	0	0	0	0
disarrangement:olfactory epithelium		−				−				−			3	0	0	0	0	0	0	0	0	0	0	0
atrophy:olfactory epithelium		−				−				−			2	3	0	0	0	0	0	0	0	0	0	0
necrosis:olfactory epithelium		−				−				−			5	0	0	0	0	1	4	0	0	0	0	0
lung														< 5>				< 5>				< 5>		
congestion		−				−				−			1	2	0	0	0	0	0	0	3	2	0	0
hemorrhage		−				−				−			0	0	0	0	0	0	0	0	0	1	0	0
edema: alveolus		−				−				−			3	2	0	0	0	5	0	0	2	1	0	0
thrombus		−				−				−			0	1	0	0	0	0	0	0	0	0	0	0
edema:perivascular		−				−				−			3	1	0	0	0	5	0	0	0	5	0	0
bone marrow														< 5>				< 5>				< 5>		
congestion		−				−				−			1	0	0	0	0	0	0	0	0	0	0	0
thymus														< 4>				< 5>				< 5>		
atrophy		−				−				−			3	1	0	0	0	0	0	0	0	0	0	0
congestion		−				−				−			0	0	0	0	1	0	0	0	0	0	0	0
spleen														< 5>				< 5>				< 5>		
atrophy		−				−				−			4	1	0	0	0	0	0	0	0	0	0	0
heart														< 5>				< 5>				< 5>		
hemorrhage		−				−				−			0	1	0	0	2	3	0	0	0	0	0	0
stomach														< 5>				< 5>				< 5>		
ulcer:forestomach		−				−				−			1	0	0	0	0	0	0	0	0	0	0	0
erosion:glandular stomach		−				−				−			1	0	0	0	0	0	0	0	0	0	0	0

TABLE 13 INCIDENCES OF SELECTED LESIONS OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE (DEAD AND MORIBUND ANIMALS) (CONTINUE)

Group Name	Control				500ppm				1000ppm				2000ppm				4000ppm				8000ppm			
No. of Animals on Study	0				0				0				5				5				5			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
liver													< 5>				< 5>				< 5>			
necrosis:central	—				—				—				1	0	0	0	1	0	0	0	0	0	0	0
vacuolic change	—				—				—				0	0	0	0	5	0	0	0	0	0	0	0
urinary bladder													< 5>				< 5>				< 5>			
hemorrhage	—				—				—				0	1	0	0	0	0	0	0	0	0	0	0
adrenal gland													< 5>				< 5>				< 5>			
hemorrhage	—				—				—				0	0	0	0	0	1	2	0	0	0	0	0
brain													< 5>				< 5>				< 5>			
degeneration:granular cell	—				—				—				5	0	0	0	0	0	0	0	0	0	0	0

Grade 1: Slight 2 : Moderate 3: Marked 4 :Severe
< > : Number of animals examined at the site
— : All animals survived at the terminal necropsy

TABLE 14 INCIDENCES OF SELECTED LESIONS OF FEMALE RATS IN THE 2-WEEK INHALATION STUDY OF 1-BROMOBUTANE (SACRIFICED ANIMALS)

Group Name	Control				500ppm				1000ppm				2000ppm				4000ppm				8000ppm			
No. of Animals on Study	5				5				5				0				0				0			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
nasal cavity			<5>				<5>				<5>													
disarrangement:olfactory epithelium	0	0	0	0	5	0	0	0	5	0	0	0	−				−				−			

Grade 1: Slight 2 : Moderate 3: Marked 4 :Severe
< > : Number of animals examined at the site
− : All animals died before the terminal necropsy