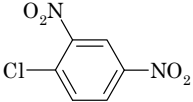


Experimental Data-1

(B0003-1/3)

1-Chloro-2,4-dinitrobenzene (1-クロロ-2,4-ジニトロベンゼン)

Chemical Name	; 1-Chloro-2,4-dinitrobenzene	
Synonym	; 4-Chloro-1,3-dinitrobenzene 6-Chloro-1,3-dinitrobenzene	
Molecular Weight	; 202.55	
Melting Point	; 51°C	[CHCD]
Boiling Point	; 315°C(decomposition)[CHCD]	
Flashing Point	; 194°C	[CHCD]
Molecular Formular	; C <sub>6</sub> H <sub>3</sub> ClN <sub>2</sub> O <sub>4</sub>	
Chemical Structure:		
CAS No.	; 97-00-7	
METI No.	; (3)-454	
MHLW No.	; -	
Specified Chemical Substances;	-	
Source of Substance;	Tokyo Kasei Kogyo Co., Ltd.	
Lot No.	; FHH01	
Purity	; >99.0%	
Vehicle	; DMSO	

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
		( 111 )	( 113 )	( 9 )	( 11 )	( 66 )	( 104 )	( 18 )	( 23 )	( 10 )
1.22	106	129	8	8	76	119	32	14	9	16
	( 116 )	( 120 )	( 9 )	( 6 )	( 94 )	( 113 )	( 39 )	( 20 )	( 12 )	( 12 )
4.88	232	151	7	7	59	107	21	24	6	2
	( 216 )	( 131 )	( 10 )	( 5 )	( 59 )	( 103 )	( 31 )	( 24 )	( 7 )	( 6 )
19.5	1984	272	23	5	74	109	263	30	32	9
	( 1991 )	( 255 )	( 22 )	( 4 )	( 74 )	( 110 )	( 275 )	( 31 )	( 31 )	( 9 )
78.1	2727	1816	21	36	209	105	250 *	226	31 *	21
	( 2695 )	( 1906 )	( 22 )	( 32 )	( 226 )	( 108 )	( 238 *)	( 224 )	( 32 *)	( 23 )
313	0 *	3389	0 *	55	380	153	0 *	1002	0 *	63
	( 0 *)	( 3463 )	( 0 *)	( 52 )	( 401 )	( 150 )	( 0 *)	( 976 )	( 0 *)	( 74 )
1250	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)
5000	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)	( 0 *)
Judgement	+	+	+	+	+	+	+	+	+	+
Specific Mutagenicity	96400	23000	667	269	2050		17200	3040	1080	198
Positive Control	AF-2 ( 644 )	2-AA ( 1498 )	NaN <sub>3</sub> ( 413 )	2-AA ( 237 )	AF-2 ( 823 )	2-AA ( 1030 )	AF-2 ( 494 )	2-AA ( 520 )	9-AA ( 315 )	2-AA ( 188 )

Mutagenicity in Bacterial Test: Positive

IARC Evaluation ; not yet cited

\* Growth inhibition was observed.

Conc. μ g/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
DMSO	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	( 112 )	( 114 )	( 14 )	( 8 )	( 78 )	( 96 )	( 18 )	( 29 )	( 13 )	( 12 )
1 .22	( )	( )	( )	( )	( )	( )	28	( )	10	( )
							28		13	
2 .44	( )	( )	( )	( )	( )	( )	( 28 )	( )	( 12 )	( )
							21		9	
							21		15	
							( 21 )	( )	( 12 )	( )
	250		20				44		14	
4 .88	( 245 )	( )	( 15 )	( )	( )	( )	51	( )	7	( )
							( 48 )	( )	( 11 )	( )
	720		16				218		18	
	752		16				227		15	
9 .77	( 736 )	( )	( 16 )	( )	( )	( )	( 223 )	( )	( 17 )	( )
	2264	288	16	9	94	87	298	32	20	9
	2125	291	30	8	97	134	286	37	28	6
19 .5	( 2195 )	( 290 )	( 23 )	( 9 )	( 96 )	( 111 )	( 292 )	( 35 )	( 24 )	( 8 )
	3335	1425	34	20	129	109	342 *	144	23 *	21
	2410	1276	39	26	151	91	300 *	155	26 *	20
39 .1	( 2873 )	( 1351 )	( 37 )	( 23 )	( 140 )	( 100 )	( 321 *)	( 150 )	( 25 *)	( 21 )
	3381	2435	56	36	249	139	272 *	238	15 *	29
	3032	2372	68	29	305	141	240 *	218	16 *	24
78 .1	( 3207 )	( 2404 )	( 62 )	( 33 )	( 277 )	( 140 )	( 256 *)	( 228 )	( 16 *)	( 27 )
	3235	3075	13 *	51	455	122		506		46
	3372	2683	21 *	40	476	134		522		46
156	( 3304 )	( 2879 )	( 17 *)	( 46 )	( 466 )	( 128 )	( )	( 514 )	( )	( 46 )
	0 *	3629	0 *	43	310 *	209		1090		67
	0 *	3747	0 *	52	359 *	193		1137		63
313	( 0 *)	( 3688 )	( 0 *)	( 48 )	( 335 *)	( 201 )	( )	( 1114 )	( )	( 65 )
		0 *		0 *	0 *	100 *		0 *		0 *
		0 *		0 *	0 *	98 *		0 *		0 *
625	( )	( 0 *)	( )	( 0 *)	( 0 *)	( 99 *)	( )	( 0 *)	( )	( 0 *)
		0 *		0 *	0 *	0 *		0 *		0 *
		0 *		0 *	0 *	0 *		0 *		0 *
1250	( )	( 0 *)	( )	( 0 *)	( 0 *)	( 0 *)	( )	( 0 *)	( )	( 0 *)
Judgement	+	+	+	+	+	+	+	+	-	+
Specific Mutagenicity	107000	31600	615	384	2550	335	21000	3470		218
Positive Control	AF-2 ( 637 )	2-AA ( 1242 )	NaN <sub>3</sub> ( 428 )	2-AA ( 273 )	AF-2 ( 802 )	2-AA ( 1387 )	AF-2 ( 544 )	2-AA ( 436 )	9-AA ( 385 )	2-AA ( 225 )

\* Growth inhibition was observed.

Experimental Data-3

(B0003-3/3)

Conc. μ g/plate	Number of Revertants/plate					
	Base-substitution				Frame-shift	
	TA100		WP2uvrA/pKM101		TA98	TA1537
DMSO	S9-	S9+	S9-	S9+	S9-	S9-
	( 120 )	( 111 )	( 71 )	( 112 )	( 21 )	( 11 )
0.610	131 123 ( 127 )	( )	( )	( )	( )	( )
1.22	129 137 ( 133 )	98 138 ( 118 )	( )	( )	31 28 ( 30 )	( )
2.44	157 186 ( 172 )	127 108 ( 118 )	( )	( )	41 41 ( 41 )	17 14 ( 16 )
4.88	285 248 ( 267 )	150 139 ( 145 )	( )	( )	62 68 ( 65 )	17 10 ( 14 )
9.77	1177 1163 ( 1170 )	121 146 ( 134 )	78 54 ( 66 )	( )	201 183 ( 192 )	9 21 ( 15 )
19.5	2084 2161 ( 2123 )	361 331 ( 346 )	90 87 ( 89 )	119 133 ( 126 )	267 * 241 * ( 254 * )	36 25 ( 31 )
39.1	( )	1329 1586 ( 1458 )	107 145 ( 126 )	120 111 ( 116 )	286 * 227 * ( 257 * )	36 * 37 * ( 37 * )
78.1	( )	( )	228 239 ( 234 )	115 128 ( 122 )	( )	26 * 37 * ( 32 * )
156	( )	( )	346 312 ( 329 )	130 148 ( 139 )	( )	( )
313	( )	( )	266 * 227 * ( 247 * )	222 213 ( 218 )	( )	( )
625	( )	( )	( )	0 * 0 * ( 0 * )	( )	( )
Judgement	+	+	+	-	+	+
Specific Mutagenicity	107000	34500	2090		17500	1030
Positive Control	AF-2 ( 659 )	2-AA ( 979 )	AF-2 ( 1418 )	2-AA ( 1104 )	AF-2 ( 424 )	9-AA ( 287 )

\* Growth inhibition was observed.