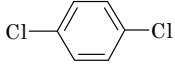


Experimental Data-1

(B0008-1/2)

1,4-Dichlorobenzene (1,4-ジクロロベンゼン)

Chemical Name	; 1,4-Dichlorobenzene	
Synonym	; p-Dichlorobenzene	
Molecular Weight	; 147.00	
Melting Point	; 54 °C [CHCD]	
Boiling Point	; 174 °C [CHCD]	
Flashing Point	; 65.6°C(c.c.)[Merck]	
Molecular Formula	; C ₆ H ₄ Cl ₂	
Chemical Structure:		
CAS No.	; 106-46-7	
METI No.	; (3)-41	
MHLW No.	; -	
Specified Chemical Substances	; -	
Source of Substance	; Tokyo Kasei Kogyo Co., Ltd.	
Lot No.	; GE01	
Purity	; 99.00%	
Vehicle	; Air	
Exposure Condition	; 37°C, 24hr	
Culture Condition	; 37°C, 24hr	

Mutagenicity in Bacterial Test: Positive

IARC Evaluation ; Group 2B

Conc. %	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA/pKM101		TA98		TA1537	
Air	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
		(125)	(115)	(10)	(13)	(56)	(79)	(19)	(22)	(6)
0 .005	102	121	17	10	67	99	24	32	6	9
	(106)	(120)	(17)	(13)	(62)	(88)	(18)	(25)	(7)	(10)
0 .01	127	135	13	21	52	90	15	15	9	10
	(114)	(137)	(15)	(19)	(50)	(85)	(17)	(20)	(8)	(12)
0 .05	124	91	17	14	51	61	11	28	7	10
	(117)	(113)	(19)	(13)	(59)	(69)	(11)	(26)	(6)	(10)
0 .1	85	100	20	17	34	68	16	16	8	6
	(99)	(100)	(18)	(16)	(45)	(66)	(18)	(15)	(7)	(8)
0 .5	56 *	62 *	6 *	3 *	22 *	24 *	10 *	3 *	2 *	7 *
	(50 *)	(55 *)	(10 *)	(3 *)	(20 *)	(23 *)	(10 *)	(4 *)	(2 *)	(8 *)
1	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)
5	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (539)	2-AA (1285)	NaN ₃ (426)	2-AA (263)	AF-2 (646)	2-AA (1279)	AF-2 (653)	2-AA (365)	9-AA (480)	2-AA (304)

* Growth inhibition was observed.

Experimental Data-2

Conc. %	Number of Revertants/plate									
	Base-substitution					Frame-shift				
	TA100		TA1535		WP2 <i>avrA</i> /pKM101		TA98		TA1537	
Air	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
	(112)	(106)	(9)	(9)	(69)	(92)	(17)	(29)	(6)	(8)
0 .005	100	131	9	6	70	87	21	26	3	11
	134	115	8	9	79	82	10	38	8	5
0 .01	(117)	(123)	(9)	(8)	(75)	(85)	(16)	(32)	(6)	(8)
	108	128	14	9	72	92	16	17	8	14
0 .02	108	117	17	9	67	99	17	26	6	13
	(108)	(123)	(16)	(9)	(70)	(96)	(17)	(21)	(7)	(14)
0 .05	98	133	6	13	74	84	22	29	6	5
	127	133	14	10	83	99	16	29	7	8
0 .1	(113)	(133)	(10)	(12)	(79)	(92)	(19)	(29)	(7)	(7)
	97	100	10	9	82	102	17	23	6	13
0 .2	116	101	6	5	77	124	23	20	6	9
	(107)	(101)	(8)	(7)	(80)	(113)	(20)	(22)	(6)	(11)
0 .5	143	143	34	44	62	86	15	17	5	3
	130	160	23	29	62	84	17	25	0	5
0 .5	(137)	(152)	(29)	(37)	(62)	(85)	(16)	(21)	(3)	(4)
	83	133	17	14	25	76	15	40	2	5
0 .5	100	131	14	17	39	122	13	23	2	6
	(92)	(132)	(16)	(16)	(32)	(99)	(14)	(32)	(2)	(6)
0 .5	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
0 .5	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)
	Judgement	-	-	+	+	-	-	-	-	-
Specific Mutagenicity #			0.1%	0.1%						
Positive Control	AF-2 (480)	2-AA (1255)	NaN ₃ (356)	2-AA (260)	AF-2 (773)	2-AA (1333)	AF-2 (625)	2-AA (372)	9-AA (333)	2-AA (244)

* Growth inhibition was observed.

The concentration which was two times of the negative control value was shown.

Experimental Data-3

(B0008-2/2)

Conc. %	Number of Revertants/plate	
	Base-substitution	
	TA1535	
Air	S9-	S9+
	(8)	(8)
0 .005	3	10
	13	11
0 .01	(8)	(11)
	14	13
0 .02	13	7
	(14)	(10)
0 .05	7	11
	8	13
0 .1	(8)	(12)
	29	8
0 .2	38	14
	(34)	(11)
0 .5	34	32
	39	29
0 .5	(37)	(31)
	1	10
0 .5	2	10
	(2)	(10)
0 .5	0 *	0 *
	0 *	0 *
0 .5	(0 *)	(0 *)
	Judgement	+
Specific Mutagenicity #	0.05%	0.1%
Positive Control	NaN ₃ (428)	2-AA (303)