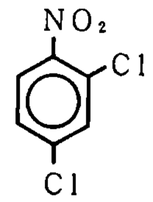
2,4-Dichloronitrobenzene (2,4-ジクロロニトロベンゼン)

Chemical Name: 2,4-Dichloronitrobenzene
Synonym: Benzene, 2,4-dichloro-1-nitro-
Molecular weight: 192.01
Melting point: 29~33℃
Boiling point: 258.5℃
Flashing point: > 110℃
Chemical Structure



CAS No : 611-06-3
MITI No: (3)-455
Source of Substance:Tokyo Kasei Kogyo Co.Ltd
Lot.No.: FBY01
Purity : 99 %
Vehicle: DMSO

Mutagenicity
in Bacterial Test : Positive

IARC Evaluation : not yet cited

Experimental Data

Con. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DSMO	(133)	(142)	(12)	(16)	(19)	(21)	(16)	(18)	(7)	(9)
	135	125	17	20	29	18	15	14	9	9
	146	141	7	7	24	32	12	23	7	8
0.0763	(141)	(133)	(12)	(14)	(27)	(25)	(14)	(19)	(8)	(9)
	157	116	13	15	16	15	14	18	14	12
	158	132	21	13	18	25	13	23	9	7
0.305	(158)	(124)	(17)	(14)	(17)	(20)	(14)	(21)	(12)	(10)
	169	141	7	8	7	25	24	27	14	13
	146	197	13	16	16	27	21	29	8	12
1.22	(158)	(169)	(10)	(12)	(12)	(26)	(23)	(28)	(11)	(13)
	135	190	14	21	24	30	32	25	5	8
	169	198	7	18	22	15	16	22	13	10
4.88	(152)	(194)	(11)	(20)	(23)	(23)	(24)	(24)	(9)	(9)
	149	198	14	16	17	24	12	35	6	5
	154	201	9	14	17	25	17	25	9	8
19.5	(152)	(200)	(12)	(15)	(17)	(25)	(15)	(30)	(8)	(7)
	185	417	14	17	23	12	14	29	7	12
	168	401	15	14	29	27	21	32	5	7
78.1	(177)	(409)	(15)	(16)	(26)	(20)	(18)	(31)	(6)	(10)
	0*	0*	0*	0*	0*	40*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	13*	0*	0*	0*	0*
313	(0*)	(0*)	(0*)	(0*)	(0*)	(27*)	(0*)	(0*)	(0*)	(0*)
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	−	+	−	−	−	−	−	−	−	−
Specific mutagenicity		3420								
Positive Control	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(807)	(928)	(258)	(297)	(190)	(780)	(493)	(310)	(342)	(187)

Experimental Data

Con. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DSMO	(140)	(119)	(9)	(17)	(18)	(24)	(12)	(20)	(7)	(10)
	147	185	8	16	13	35	10	30	7	14
	170	145	13	12	15	28	13	31	3	14
4.88	(159)	(165)	(11)	(14)	(14)	(32)	(12)	(31)	(5)	(14)
	92	151	8	13	21	21	22	27	5	13
	127	212	12	9	20	30	17	32	9	8
9.77	(110)	(182)	(10)	(11)	(21)	(26)	(20)	(30)	(7)	(11)
	155	206	8	10	15	34	22	28	13	15
	124	236	7	17	22	14	15	23	5	13
19.5	(140)	(221)	(8)	(14)	(19)	(24)	(19)	(26)	(9)	(14)
	155	295	14	15	23	17	16	21	10	5
	160	319	10	15	12	20	20	21	8	12
39.1	(158)	(307)	(12)	(15)	(18)	(19)	(18)	(21)	(9)	(9)
	185	449	10	15	10	21	17	32	7	13
	186	400	14	21	18	27	20	31	9	9
78.1	(186)	(425)	(12)	(18)	(14)	(24)	(19)	(32)	(8)	(11)
	113*	578	0*	21	23	22	13*	45	8*	8
	106*	520	0*	9	23	32	7*	38	3*	15
156	(110*)	(549)	(0*)	(15)	(23)	(27)	(10*)	(42)	(6*)	(12)
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
313	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	−	+	−	−	−	−	−	+	−	−
Specific mutagenicity		4810						141		
Positive	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(764)	(1002)	(276)	(331)	(160)	(818)	(449)	(310)	(366)	(200)