1,3-Dibromopropane (1,3-ジブロモプロパン)

Chemical Name: 1,3-Dibromopropane
Synonym: Trimethylenedibromide
Propane, 1,3-dibromo-
Molecular weight: 201.89
Melting point: -34℃
Boiling point: 165~167℃
Flashing point: 54℃
Chemical Structure

$BrCH_2CH_2CH_2Br$

CAS No : 109-64-8
MITI No: (2)-59
Source of Substance:Tokyo Kasei Kogyo Co.Ltd
Lot.No.: AY01
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	(123)	(105)	(11)	(20)	(36)	(31)	(22)	(19)	(10)	(9)
	143	112	12	8	30	36	13	18	12	7
	142	124	20	18	42	24	14	14	14	15
0.0763	(143)	(118)	(16)	(13)	(36)	(30)	(14)	(16)	(13)	(11)
	145	121	15	27	27	21	13	9	15	15
	153	105	10	17	22	24	14	24	9	18
0.305	(149)	(113)	(13)	(22)	(25)	(23)	(14)	(17)	(12)	(17)
	153	102	20	24	32	35	13	16	16	13
	106	118	12	21	25	29	16	15	10	10
1.22	(130)	(110)	(16)	(23)	(29)	(32)	(15)	(16)	(13)	(12)
	141	114	15	18	30	36	10	20	7	12
	105	125	17	22	42	34	10	16	6	17
4.88	(123)	(120)	(16)	(20)	(36)	(35)	(10)	(18)	(7)	(15)
	126	133	9	47	38	31	24	18	17	5
	116	118	15	36	17	39	15	21	12	5
19.5	(121)	(126)	(12)	(42)	(28)	(35)	(20)	(20)	(15)	(5)
	106	177	16	98	42	29	17	22	8	16
	117	164	17	69	37	37	17	27	8	13
78.1	(112)	(171)	(17)	(84)	(40)	(33)	(17)	(25)	(8)	(15)
	176	264	28	165	45	53	16	16	6	13
	184	261	15	205	61	51	21	20	13	9
313	(180)	(263)	(22)	(185)	(53)	(52)	(19)	(18)	(10)	(11)
	62*	96*	0*	0*	37*	28*	0*	0*	0*	8*
	68*	121*	0*	0*	17*	38*	0*	0*	0*	5*
1250	(65*)	(109*)	(0*)	(0*)	(27*)	(33*)	(0*)	(0*)	(0*)	(7*)
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	−	+	+	+	−	−	−	−	−	−
Specific mutagenicity		505	35.1	1130						
Positive Control	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(691)	(970)	(226)	(311)	(142)	(869)	(480)	(264)	(318)	(211)

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	(137)	(116)	(12)	(12)	(22)	(30)	(14)	(22)	(9)	(11)
				20						
				17						
4.88				(19)						
				23						
				29						
9.77				(26)						
	127	119	13	24	21	29	9	12	3	5
	110	119	7	23	17	29	7	20	10	10
19.5	(119)	(119)	(10)	(24)	(19)	(29)	(8)	(16)	(7)	(8)
	121	155	15	45	31	23	16	24	9	9
	134	150	18	31	21	30	18	20	8	16
39.1	(128)	(153)	(17)	(38)	(26)	(27)	(17)	(22)	(9)	(13)
	138	179	9	75	23	31	13	30	3	7
	145	146	16	86	35	29	27	21	7	5
78.1	(142)	(163)	(13)	(81)	(29)	(30)	(20)	(26)	(5)	(6)
	164	213	22	118	43	45	20	24	7	7
	160	194	24	106	31	44	16	30	10	8
156	(162)	(204)	(23)	(112)	(37)	(45)	(18)	(27)	(9)	(8)
	147	235	37	166	30	45	15	25	5	8
	170	260	23	163	39	61	13	20	6	9
313	(159)	(248)	(30)	(165)	(35)	(53)	(14)	(23)	(6)	(9)
	160	284	30		40	68	17	30	10	6
	191	273	30		57	86	27	18	12	5
625	(176)	(279)	(30)		(49)	(77)	(22)	(24)	(11)	(6)
	0*	0*	0*		0*	0*	0*	0*	0*	0*
	0*	0*	0*		0*	0*	0*	0*	0*	0*
1250	(0*)	(0*)	(0*)		(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	−	+	+	+	+	+	−	−	−	−
Specific mutagenicity		422	57.5	1430	43.2	75.2				
Positive	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(733)	(979)	(241)	(328)	(159)	(806)	(435)	(317)	(271)	(196)