Chemical Name ; 1,2-Dibromopropane

Synonym ; Propyrene dibromide

Molecular Weight ; 201.89
Melting Point ; -55 ℃[Aldrich]
Boiling Point ; 140-142℃[Aldrich]
Flashing Point ; －
Molecular Formula ; $C_3H_6Br_2$

Chemical Structure

$CH_3CHBrCH_2Br$

CAS No. ; 78-75-1
MITI No. ; －
ML No. ; －
Specified Chemical Substances ; －

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; FGD01
; 99.4%

Vehicle ; DMSO

Mutagenicity in Bacterial Test ; Positive

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvr*A		TA98		TA1537	
	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋
DMSO	(141)	(165)	(9)	(8)	(17)	(24)	(16)	(22)	(7)	(8)
	141	149	8	14	11	17	10	17	8	9
	145	166	8	8	17	20	15	20	8	15
1 .22	(143)	(156)	(8)	(11)	(14)	(19)	(13)	(19)	(8)	(12)
	165	173	10	10	21	17	8	15	9	8
	153	151	5	9	17	17	16	21	5	13
4 .88	(159)	(162)	(8)	(10)	(19)	(17)	(12)	(18)	(7)	(11)
	179	145	9	7	16	18	15	28	5	9
	139	186	9	8	13	24	11	16	7	7
19 .5	(159)	(166)	(9)	(8)	(15)	(21)	(13)	(22)	(6)	(8)
	171	162	7	9	15	21	16	10	7	11
	130	163	14	9	16	20	8	18	3	7
78 .1	(151)	(163)	(11)	(9)	(16)	(21)	(12)	(14)	(5)	(9)
	166	229	11	14	16	23	15	20	6	11
	176	209	15	15	17	22	17	21	7	8
313	(171)	(219)	(13)	(15)	(17)	(23)	(16)	(21)	(7)	(10)
	127 *	120 *	0 *	0 *	16 *	24 *	0 *	6 *	5 *	8 *
	127 *	87 *	0 *	0 *	13 *	16 *	0 *	11 *	5 *	7 *
1250	(127 *)	(104 *)	(0 *)	(0 *)	(15 *)	(20 *)	(0 *)	(9 *)	(5 *)	(8 *)
	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 *)
Judgement	－	－	－	－	－	－	－	－	－	－
Specific Mutagenicity										
Positive Control	AF-2 (679)	2-AA (1238)	NaN_3 (268)	2-AA (210)	AF-2 (287)	2-AA (1014)	AF-2 (415)	2-AA (442)	9-AA (735)	2-AA (163)

* Growth inhibitation was observed.

Experimental Data-2

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvr*A		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
DMSO	(158)	(157)	(8)	(10)	(21)	(25)	(17)	(26)	(7)	(9)
	173	165	6	7	20	26	11	18	5	7
	162	184	8	5	25	21	17	24	7	6
39 .1	(168)	(175)	(7)	(6)	(23)	(24)	(14)	(21)	(6)	(7)
	148	177	7	7	34	18	22	31	6	9
	167	173	13	7	24	29	15	23	5	7
78 .1	(158)	(175)	(10)	(7)	(29)	(24)	(19)	(27)	(6)	(8)
	163	178	6	15	21	18	18	26	6	7
	153	181	6	13	22	33	11	31	5	7
156	(158)	(180)	(6)	(14)	(22)	(26)	(15)	(29)	(6)	(7)
	178	222	9	11	22	30	22	26	7	11
	135	201	7	15	21	37	18	15	7	7
313	(157)	(212)	(8)	(13)	(22)	(34)	(20)	(21)	(7)	(9)
	173	218 *	6 *	30 *	25	28	15	25 *	3	5 *
	134	225 *	8 *	25 *	18	25	17	20 *	5	9 *
625	(154)	(222 *)	(7 *)	(28 *)	(22)	(27)	(16)	(23 *)	(4)	(7 *)
	126 *	119 *	0 *	0 *	20 *	21 *	0 *	8 *	7 *	5 *
	129 *	142 *	0 *	0 *	10 *	22 *	0 *	8 *	3 *	7 *
1250	(128 *)	(131 *)	(0 *)	(0 *)	(15 *)	(22 *)	(0 *)	(8 *)	(5 *)	(6 *)
Judgement	−	−	−	+	−	−	−	−	−	−
Specific Mutagenicity				28.8						
Positive Control	AF-2 (719)	2-AA (1251)	NaN_3 (220)	2-AA (210)	AF-2 (234)	2-AA (1041)	AF-2 (420)	2-AA (423)	9-AA (761)	2-AA (163)

Experimental Data-3

Conc. μg/plate	Base-substitution	
	TA1535	
	S9−	S9+
DMSO	(6)	(8)
		13
		10
39 .1		(12)
		7
		13
78 .1		(10)
		16
		14
156		(15)
		17
		17
313		(17)
		33
		26
500		(30)
		23 *
		32 *
600		(28 *)
		20 *
		28 *
625		(24 *)
		28 *
		20 *
700		(24 *)
		14 *
		17 *
800		(16 *)
Judgement		+
Specific Mutagenicity		44.0
Positive Control	NaN_3 (330)	2-AA (246)