

【臭化モノブロム酢酸】

Chemical Name; Bromoacetyl bromide

Synonym ; Monobromoacetyl bromide

ブ^ロモアセチルブ^ロミド^トブ^ロモ酢酸ブ^ロマイド^トブ^ロム酢酸ブ^ロマイド^ト

Molecular Weight ; 201.85

Melting Point ; - ℃

Boiling Point ; 150 ℃ [CHCD]
147 - 150 ℃ [Aldrich]

Flashing Point ; - ℃

Molecular Formula; C₂H₂Br₂O

Chemical Structure



CAS No. ; 598-21-0

MITI No. ; (9)-1275

ML No. ; -

Specified Chemical Substances; -

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.

Lot No. ; FHB01

Purity ; 98.69 %

Vehicle ; Distilled H₂O

Mutagenicity in Bacterial Test ; Positive

IARC Evaluation ; not yet cited

Conc. 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+
H ₂ O	(148)	(136)	(9)	(12)	(28)	(39)	(17)	(21)	(6)	(12)
	133	157	10	9	41	39	16	37	5	14
	164	128	8	13	31	39	14	22	11	14
0.0763	(149)	(143)	(9)	(11)	(36)	(39)	(15)	(30)	(8)	(14)
	129	127	9	15	24	40	17	28	3	13
	126	128	10	18	34	34	15	29	10	16
0.305	(128)	(128)	(10)	(17)	(29)	(37)	(16)	(29)	(7)	(15)
	152	127	8	14	36	36	16	14	8	18
	135	131	8	6	36	40	25	40	13	15
1.22	(144)	(129)	(8)	(10)	(36)	(38)	(21)	(27)	(11)	(17)
	142	123	9	9	31	43	28	32	7	6
	155	142	10	14	32	49	15	24	9	8
4.88	(149)	(133)	(10)	(12)	(32)	(46)	(22)	(28)	(8)	(7)
	158	136	7	22	38	41	16	44	15	14
	146	152	14	21	30	26	14	26	7	13
19.5	(152)	(144)	(11)	(22)	(34)	(34)	(15)	(35)	(11)	(14)
	160	149	9	7*	32	30	17*	21*	3	10
	184	151	9	17*	22	43	11*	18*	13	16
78.1	(172)	(150)	(9)	(12*)	(27)	(37)	(14*)	(20*)	(8)	(13)
	292*	268	6*	11*	43	64	20*	28*	9*	9*
	282*	263	8*	9*	36	56	11*	25*	8*	11*
313	(287*)	(266)	(7*)	(10*)	(40)	(60)	(16*)	(27*)	(9*)	(10*)
	0*	0*	0*	0*	40*	55*	0*	5*	0*	0*
	0*	0*	0*	0*	18*	47*	0*	1*	0*	0*
1250	(0*)	(0*)	(0*)	(0*)	(29*)	(51*)	(0*)	(3*)	(0*)	(0*)
	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 (880)	2-AA (1046)	NaN ₃ (331)	2-AA (266)	AF-2 (207)	2-AA (1314)	AF-2 (542)	2-AA (316)	9-AA (515)	2-AA (209)

† Test chemical was precipitated.

Conc. µg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 <i>uvrA</i>		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
H ₂ O	(139)	(141)	(10)	(12)	(28)	(35)	(17)	(21)	(7)	(9)
1. 22							22	37	6	7
							26	26	10	15
							(24)	(32)	(8)	(11)
							18	25	7	5
							14	37	7	5
2. 44							(16)	(31)	(7)	(5)
	144		11	13			15	33	8	2
	131		11	8			29	23	7	11
4. 88	(138)		(11)	(11)			(22)	(28)	(8)	(7)
	129	146	8	8			18	20	5	7
	128	159	20	10			25	37	6	3
9. 77	(129)	(153)	(14)	(9)			(22)	(29)	(6)	(5)
	111	137	9	18	21	26	20	22	7	9
	131	165	3	10	26	24	15	22	7	5
19. 5	(121)	(151)	(6)	(14)	(24)	(25)	(18)	(22)	(7)	(7)
	148	129	9	13	31	43	13*	29	5	5
	131	159	14	14	22	32	29*	28	5	13
39. 1	(140)	(144)	(12)	(14)	(27)	(38)	(21*)	(29)	(5)	(9)
	157	144	14	14*	30	39	13*	28*	3	7
	160	152	6	17*	24	32	14*	28*	6	6
78. 1	(159)	(148)	(10)	(16*)	(27)	(36)	(14*)	(28*)	(5)	(7)
	179*	183	8	13*	28	32	13*	29*	2*	7*
	172*	178	10	10*	22	34	11*	22*	2*	7*
156	(176*)	(181)	(9)	(12*)	(25)	(33)	(12*)	(26*)	(2*)	(7*)
	221*	250	16*	14*	43	36*				
	304*	228	3*	5*	32	29*				
313	(263*)	(239)	(10*)	(10*)	(38)	(33*)				
	1*	18*	1*	1*	39	43*				
	3*	22*	3*	3*	44	54*				
625	(2*)	(20*)	(2*)	(2*)	(42)	(49*)				
		0*			15*	37*				
		0*			31*	30*				
1250		(0*)			(23*)	(34*)				
					0*	0*				
					0*	0*				
2500					(0*)	(0*)				
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (708)	2-AA (935)	NaN ₃ (310)	2-AA (256)	AF-2 (230)	2-AA (1213)	AF-2 (546)	2-AA (246)	9-AA (523)	2-AA (175)

Experimental Data - 3

Conc. µg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
H ₂ O	(347)	(406)	(312)	(346)	(60)	(91)
	330	401	307	362	39	89
	349	440	299	355	62	83
0.0763	(340)	(421)	(303)	(359)	(51)	(86)
	353	412	266	336	62	84
	305	368	316	331	67	76
0.305	(329)	(390)	(291)	(334)	(65)	(80)
	320	436	312	314	55	104
	301	400	313	353	53	77
1.22	(311)	(418)	(313)	(334)	(54)	(91)
	320	397	328	329	66	85
	356	389	307	362	49	100
4.88	(338)	(393)	(318)	(346)	(58)	(93)
	383	422	387	356	57	69
	334	391	421	355	44	86
19.5	(359)	(407)	(404)	(356)	(51)	(78)
	334	421	856	806	82	137
	317	371	810	723	60	146
78.1	(326)	(396)	(833)	(765)	(71)	(142)
	265	424	2121	1740	108	236
	332	496	2018	1437	100	225
313	(299)	(460)	(2070)	(1589)	(104)	(231)
	0*	14*	0*	1*	107*	361*
	0*	8*	0*	0*	83*	343*
1250	(0*)	(11*)	(0*)	(1*)	(95*)	(352*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	-	+	+	-	+
Specific Mutagenicity			6670	5360		447
Positive Control	BLM (907)	2-AA (1283)	PA (2037)	2-AA (1271)	AF-2 (786)	2-AA (1092)

Experimental Data - 4

(B9313-3/3)

Conc. µg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
H ₂ O	(292)	(333)	(288)	(357)	(72)	(95)
	267	341	367	402	56	94
	307	344	388	376	56	93
19.5	(287)	(343)	(378)	(389)	(56)	(94)
	290	370	405	422	49	101
	299	371	445	407	66	76
39.1	(295)	(371)	(425)	(415)	(58)	(89)
	312	396	1024	653	84	120
	310	408	953	621	69	130
78.1	(311)	(402)	(989)	(637)	(77)	(125)
	310	416	1320	1025	64	199
	301	377	1318	1130	68	206
156	(306)	(397)	(1319)	(1078)	(66)	(203)
	326	422	2096	1639	105	310
	286	414	2303	1607	74	325
313	(306)	(418)	(2200)	(1623)	(90)	(318)
	212*	388*	78*	2639*	137	444
	230*	393*	119*	2204*	115	334
625	(221*)	(391*)	(99*)	(2422*)	(126)	(389)
	0*	3*	0*	2*	187*	603*
	0*	2*	0*	0*	214*	467*
1250	(0*)	(3*)	(0*)	(1*)	(201*)	(535*)
Judgement	-	-	+	+	+	+
Specific Mutagenicity			8980	4620	103	712
Positive Control	BLM (882)	2-AA (1283)	PA (2089)	2-AA (1101)	AF-2 (1439)	2-AA (887)