

2-Propanol

[2-プロパノール]

Experimental Data - 1

(B9410-1/3)

Chemical Name;	2-Propanol
Synonym	; Isopropyl alcohol
	Isopropanol
	2-Hydroxypropane
	イソプロパノールアルコール
	イソプロパノール
	2-ヒドロキシプロパノール
Molecular Weight	; 60.10
Melting Point	; - 88.5 °C [CHCD, Merck]
	- 89.5 °C [Aldrich]
Boiling Point	; 82.5 °C [CHCD, Merck]
	82.4 °C [Aldrich]
	- 26.1 °C (1.0mmHg) [Merck]
Flashing Point	; 12 °C [CHCD]
	11.7 °C (c.c.) [Merck]
Molecular Formula;	C ₃ H ₈ O
Chemical Structure	
	(CH ₃) ₂ CHOH
CAS No.	; 67-63-0
MITI No.	; (2)-207
ML No.	; 2-(8)-319
Specified Chemical Substances;	—
Source of Substance;	Tokyo Kasei Kogyo Co., Ltd.
Lot No.	; GC01
Purity	; 99.5 %
Vehicle	; Distilled H ₂ O

Mutagenicity in Bacterial Test ; **Negative**

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	(149)	(174)	(20)	(19)	(32)	(40)	(17)	(29)	(8)	(8)
	181	167	22	14	33	40	20	14	7	13
	156	166	18	20	22	43	26	10	2	9
0.0763	(169)	(167)	(20)	(17)	(28)	(42)	(23)	(12)	(5)	(11)
	159	162	34	18	31	39	11	18	11	8
	157	164	31	15	38	46	23	17	7	6
0.305	(158)	(163)	(33)	(17)	(35)	(43)	(17)	(18)	(9)	(7)
	167	151	33	11	24	46	24	22	7	7
	143	156	31	20	31	31	13	22	9	3
1.22	(155)	(154)	(32)	(16)	(28)	(39)	(19)	(22)	(8)	(5)
	169	150	34	15	33	41	11	21	10	5
	148	180	24	24	38	37	17	28	7	6
4.88	(159)	(165)	(29)	(20)	(36)	(39)	(14)	(25)	(9)	(6)
	159	163	29	13	30	40	20	20	9	5
	143	190	28	17	32	38	15	20	8	9
19.5	(151)	(177)	(29)	(15)	(31)	(39)	(18)	(20)	(9)	(7)
	162	186	32	20	48	56	15	17	7	10
	160	160	38	20	21	34	30	22	3	9
78.1	(161)	(173)	(35)	(20)	(35)	(45)	(23)	(20)	(5)	(10)
	158	166	38	21	25	33	15	29	10	9
	186	150	33	22	29	51	15	15	8	10
313	(172)	(158)	(36)	(22)	(27)	(42)	(15)	(22)	(9)	(10)
	153	171	26	16	34	44	8	18	9	8
	179	177	36	21	31	38	18	23	11	7
1250	(166)	(174)	(31)	(19)	(33)	(41)	(13)	(21)	(10)	(8)
	158	167	37	15	34	32	14	23	7	9
	181	153	33	15	33	40	14	22	10	10
5000	(170)	(160)	(35)	(15)	(34)	(36)	(14)	(23)	(9)	(10)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 (898)	2-AA (1313)	NaN ₃ (433)	2-AA (342)	AF-2 (306)	2-AA (1163)	AF-2 (409)	2-AA (340)	9-AA (770)	2-AA (209)

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	(133)	(153)	(18)	(12)	(23)	(23)	(14)	(26)	(10)	(12)
	139	166	24	6	20	37	18	23	6	6
	138	150	17	13	28	29	10	24	7	7
78.1	(139)	(158)	(21)	(10)	(24)	(33)	(14)	(24)	(7)	(7)
	133	149	23	13	23	17	7	24	11	10
	137	167	22	11	30	34	11	17	8	6
156	(135)	(158)	(23)	(12)	(27)	(26)	(9)	(21)	(10)	(8)
	142	153	23	17	25	24	11	28	6	7
	124	124	24	7	20	28	14	24	8	7
313	(133)	(139)	(24)	(12)	(23)	(26)	(13)	(26)	(7)	(7)
	130	173	20	13	21	20	16	21	6	7
	143	143	17	8	26	23	14	20	14	9
625	(137)	(158)	(19)	(11)	(24)	(22)	(15)	(21)	(10)	(8)
	149	150	18	17	24	25	13	22	6	10
	145	131	20	10	26	24	16	26	6	5
1250	(147)	(141)	(19)	(14)	(25)	(25)	(15)	(24)	(6)	(8)
	169	172	16	15	26	25	18	16	7	6
	129	139	24	11	24	24	14	23	10	7
2500	(149)	(156)	(20)	(13)	(25)	(25)	(16)	(20)	(9)	(7)
	120	145	16	6	25	30	17	26	8	10
	145	160	20	16	25	33	11	18	5	8
5000	(133)	(153)	(18)	(11)	(25)	(32)	(14)	(22)	(7)	(9)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 (825)	2-AA (1247)	NaN ₃ (364)	2-AA (328)	AF-2 (272)	2-AA (1221)	AF-2 (399)	2-AA (385)	9-AA (729)	2-AA (231)

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	(299)	(384)	(350)	(405)	(51)	(76)
	271	433	340	349	47	74
	280	382	344	340	36	71
0.0763	(276)	(408)	(342)	(345)	(42)	(73)
	285	418	336	388	52	61
	238	407	343	394	45	85
0.305	(262)	(413)	(340)	(391)	(49)	(73)
	286	439	346	413	41	59
	324	422	372	377	57	87
1.22	(305)	(431)	(359)	(395)	(49)	(73)
	304	367	355	389	48	84
	290	408	348	359	47	81
4.88	(297)	(388)	(352)	(374)	(48)	(83)
	292	385	405	435	55	100
	243	382	380	374	53	84
19.5	(268)	(384)	(393)	(405)	(54)	(92)
	286	416	376	404	48	82
	310	413	347	400	46	90
78.1	(298)	(415)	(362)	(402)	(47)	(86)
	331	390	329	384	49	85
	322	394	356	379	48	82
313	(327)	(392)	(343)	(382)	(49)	(84)
	340	366	391	397	55	89
	313	407	405	376	62	75
1250	(327)	(387)	(398)	(387)	(59)	(82)
	325	399	385	405	70	72
	319	359	356	405	47	84
5000	(322)	(379)	(371)	(405)	(59)	(78)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM (1043)	2-AA (1778)	PA (2271)	2-AA (1427)	AF-2 (1222)	2-AA (1104)

Experimental Data - 4

(B9410-3/3)

Conc. µg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
H ₂ O	(298)	(386)	(366)	(425)	(65)	(104)
	271	396	358	436	60	109
	285	388	352	387	53	102
78.1	(278)	(392)	(355)	(412)	(57)	(106)
	305	414	395	438	46	91
	262	395	355	451	53	105
156	(284)	(405)	(375)	(445)	(50)	(98)
	293	417	365	407	56	99
	295	417	385	435	51	93
313	(294)	(417)	(375)	(421)	(54)	(96)
	269	414	331	397	69	92
	300	396	331	399	59	116
625	(285)	(405)	(331)	(398)	(64)	(104)
	297	397	340	401	51	101
	297	359	373	393	57	86
1250	(297)	(378)	(357)	(397)	(54)	(94)
	330	380	366	419	47	87
	291	364	382	407	61	100
2500	(311)	(372)	(374)	(413)	(54)	(94)
	288	410	340	399	48	84
	276	370	338	417	59	94
5000	(282)	(390)	(339)	(408)	(54)	(89)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM (1046)	2-AA (2694)	PA (2424)	2-AA (1459)	AF-2 (1793)	2-AA (1294)