

1-Decanol
[1-デカノール]

Experimental Data - 1

(B9503-1/3)

Chemical Name; 1-Decanol
 Synonym ; *n*-Decyl alcohol
 Paranol
 Nonylcarbinol
 1-デカノール
 ハデカノール
 ノニルカルビノール

Molecular Weight ; 158.28
 Melting Point ; 7 °C [Aldrich] ; 6.4 °C [Merck]
 Boiling Point ; 232 - 239 °C (700mmHg) [CHCD]
 107 - 108 °C (7mmHg))
 231 °C (Aldrich)
 232.9 °C [Merck]
 115-120 °C (15mmHg))
 Flashing Point ; 82 °C [CHCD;Aldrich]
 Molecular Formula; C₁₀H₂₂O

Chemical Structure

CH₃(CH₂)₈CH₂OH

CAS No. ; 112-30-1
 MITI No. ; (2)-217
 ML No. ; -
 Specified Chemical Substances; -

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
 Lot No. ; FDX01
 Purity ; 97.9 %

Vehicle ; DMSO

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+
DMSO	(116)	(138)	(11)	(13)	(15)	(23)	(19)	(30)	(6)	(8)
	83	130	7	6	15	22	18	33	2	8
	115	109	5	8	13	24	18	22	7	9
0.0763	(99)	(120)	(6)	(7)	(14)	(23)	(18)	(28)	(5)	(9)
	100	111	8	13	15	15	13	31	5	13
	101	116	8	8	10	18	21	31	7	8
0.305	(101)	(114)	(8)	(11)	(13)	(17)	(17)	(31)	(6)	(11)
	97	121	3	7	8	16	14	23	7	14
	101	99	5	21	17	18	18	32	3	7
1.22	(99)	(110)	(4)	(14)	(13)	(17)	(16)	(28)	(5)	(11)
	84	106	8	13	14	23	15	23	6	7
	92	119	8	13	14	20	13	23	3	8
4.88	(88)	(113)	(8)	(13)	(14)	(22)	(14)	(23)	(5)	(8)
	89*	112	2*	5	20*	16	20*	31	6*	8
	72*	108	1*	10	20*	24	1*	34	2*	15
19.5	(81*)	(110)	(2*)	(8)	(20*)	(20)	(11*)	(33)	(4*)	(12)
	0*	0*	0*	0*	0*	21*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	13*	0*	0*	0*	0*
78.1	(0*)	(0*)	(0*)	(0*)	(0*)	(17*)	(0*)	(0*)	(0*)	(0*)
	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*)
	0*	0*	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*)	(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

Mutagenicity in Bacterial Test ; **Negative**

IARC Evaluation ; not yet cited

Positive Control	AF-2 (738)	2-AA (1064)	NaN ₃ (360)	2-AA (293)	AF-2 (245)	2-AA (996)	AF-2 (527)	2-AA (299)	9-AA (690)	2-AA (187)
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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+
	(113)	(125)	(9)	(10)	(23)	(33)	(12)	(23)	(4)	(8)
DMSO	122		14		32		16		1	
	142		8		26		13		3	
0.305	(132)		(11)		(29)		(15)		(2)	
	120		6		28		13		5	
	107		14		26		20		1	
0.61	(114)		(10)		(27)		(17)		(3)	
	105	120	7	2	28	37	14	21	3	6
	105	133	6	9	25	37	23	22	6	5
1.22	(105)	(127)	(7)	(6)	(27)	(37)	(19)	(22)	(5)	(6)
	86	141	6	10	37	36	18	14	8	7
	129	128	6	7	30	33	11	22	3	5
2.44	(108)	(135)	(6)	(9)	(34)	(35)	(15)	(18)	(6)	(6)
	113	148	10	16	31	34	21	20	3	6
	107	127	13	9	23	32	11	20	6	7
4.88	(110)	(138)	(12)	(13)	(27)	(33)	(16)	(20)	(5)	(7)
	83*	136	11*	3	28*	32	9*	30	5*	10
	72*	170	5*	10	26*	34	10*	24	3*	5
9.77	(78*)	(153)	(8*)	(7)	(27*)	(33)	(10*)	(27)	(4*)	(8)
	0*	102	0*	11	0*	41	0*	23	0*	6
	0*	148	0*	8	0*	29	0*	23	0*	7
19.5	(0*)	(125)	(0*)	(10)	(0*)	(35)	(0*)	(23)	(0*)	(7)
		78*		0*		38*		0*		8*
		97*		0*		24*		0*		9*
39.1		(88*)		(0*)		(31*)		(0*)		(9*)
		0*		0*		0*		0*		0*
		0*		0*		0*		0*		0*
78.1		(0*)		(0*)		(0*)		(0*)		(0*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF-2 (713)	2-AA (1009)	NaN ₃ (372)	2-AA (300)	AF-2 (256)	2-AA (1145)	AF-2 (532)	2-AA (283)	9-AA (622)	2-AA (174)

Experimental Data - 3

Conc. µg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(250)	(329)	(315)	(326)	(51)	(86)
	253	301	295	361	49	55
	232	329	279	387	53	76
0.0763	(243)	(315)	(287)	(374)	(51)	(66)
	223	305	300	387	53	82
	254	304	310	373	45	68
0.305	(239)	(305)	(305)	(380)	(49)	(75)
	256	320	293	401	57	94
	250	266	301	383	48	79
1.22	(253)	(293)	(297)	(392)	(53)	(87)
	223	318	301	391	47	92
	241	328	291	376	53	86
4.88	(232)	(323)	(296)	(384)	(50)	(89)
	190*	318	276*	377	38*	104
	209*	282	284*	402	32*	93
19.5	(200*)	(300)	(280*)	(390)	(35*)	(99)
	0*	170*	0*	191*	0*	54*
	0*	192*	0*	200*	0*	44*
78.1	(0*)	(181*)	(0*)	(196*)	(0*)	(49*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
313	(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*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)

Judgement

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Specific
Mutagenicity

Positive Control	BLM (883)	2-AA (1008)	PA (1472)	2-AA (1206)	AF-2 (1285)	2-AA (936)
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Experimental Data - 4

(B9503-3/3)

Conc. µg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(247)	(298)	(305)	(362)	(44)	(62)
	212		272		45	
	232		247		47	
0.305	(222)		(260)		(46)	
	238		286		34	
	243		276		51	
0.61	(241)		(281)		(43)	
	197	291	261	304	43	60
	188	265	268	319	44	64
1.22	(193)	(278)	(265)	(312)	(44)	(62)
	233	272	274	328	48	69
	218	272	284	394	48	74
2.44	(226)	(272)	(279)	(361)	(48)	(72)
	209	320	298	343	53	78
	223	273	256	405	53	85
4.88	(216)	(297)	(277)	(374)	(53)	(82)
	221*	300	295	330	45	69
	221*	294	260	325	38	69
9.77	(221*)	(297)	(278)	(328)	(42)	(69)
	115*	259	239*	361	18*	96
	101*	290	191*	391	21*	75
19.5	(108*)	(275)	(215*)	(376)	(20*)	(86)
		253		318		54
		228		312		64
39.1		(241)		(315)		(59)
		122*		108*		16*
		98*		152*		22*
78.1		(110*)		(130*)		(19*)

Judgement

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Specific
Mutagenicity

Positive Control	BLM (797)	2-AA (2268)	PA (2509)	2-AA (1107)	AF-2 (1256)	2-AA (1087)
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