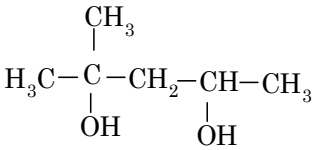
2-Methylpentane-2,4-diol (2-ﾒﾁﾙﾍﾟﾝﾀﾝ-2,4-ｼﾞｵｰﾙ)

Chemical Name ; 2-Methylpentane-2,4-diol
Synoym ; Hexylene glycol

Molecular Weight ; 118.18
Melting Point ; -40℃ [Aldrich]
Boiling Point ; 198℃ [Merck]
Flashing Point ; 93℃(o.c.)[Merck]
Molecular Formular; $C_6H_{14}O_2$

Chemical Structure;



CAS No. ; 107-41-5
METI No. ; (2)-240
MHLW No. ; －
Specified Chemical Substances;－

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; GG01-AK
Purity ; >99%

Vehicle ; Distilled H_2O

Mutagenicity in Bacterial Test; Negative

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvrA*/pKM101		TA98		TA1537	
	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋	S9－	S9＋
H_2O	(108)	(132)	(11)	(6)	(71)	(101)	(19)	(26)	(5)	(12)
	114	121	7	3	56	92	33	34	5	14
	111	115	6	7	63	81	30	17	3	18
1 .22	(113)	(118)	(7)	(5)	(60)	(87)	(32)	(26)	(4)	(16)
	124	134	6	17	79	112	21	33	8	5
	111	114	6	3	92	116	15	25	7	9
4 .88	(118)	(124)	(6)	(10)	(86)	(114)	(18)	(29)	(8)	(7)
	105	120	11	5	32	101	29	36	7	8
	101	129	10	13	113	102	22	33	6	6
19 .5	(103)	(125)	(11)	(9)	(73)	(102)	(26)	(35)	(7)	(7)
	117	124	7	9	83	109	13	36	10	7
	114	126	15	5	81	104	16	26	2	13
78 .1	(116)	(125)	(11)	(7)	(82)	(107)	(15)	(31)	(6)	(10)
	92	141	9	7	91	100	26	26	7	14
	102	149	7	6	89	97	15	25	5	15
313	(97)	(145)	(8)	(7)	(90)	(99)	(21)	(26)	(6)	(15)
	117	121	13	6	75	90	17	16	8	9
	105	113	8	10	92	94	20	22	3	6
1250	(111)	(117)	(11)	(8)	(84)	(92)	(19)	(19)	(6)	(8)
	104	141	11	10	75	104	18	13	6	9
	85	121	6	8	93	98	14	23	8	7
5000	(95)	(131)	(9)	(9)	(84)	(101)	(16)	(18)	(7)	(8)
Judgement	－	－	－	－	－	－	－	－	－	－
Specific Mutagenicity										
Positive Control	AF-2 (605)	2-AA (1081)	NaN_3 (356)	2-AA (241)	AF-2 (1376)	2-AA (733)	AF-2 (444)	2-AA (466)	9-AA (354)	2-AA (234)

Conc. μg/plate	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2*uvrA*/pKM101		TA98		TA1537	
	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+	S9−	S9+
H_2O	(118)	(117)	(10)	(8)	(75)	(102)	(15)	(22)	(7)	(14)
	109	145	9	9	85	90	20	32	6	10
	112	119	8	13	61	87	18	31	8	8
313	(111)	(132)	(9)	(11)	(73)	(89)	(19)	(32)	(7)	(9)
	134	126	8	7	68	94	11	32	5	7
	115	126	13	6	66	108	17	24	7	15
625	(125)	(126)	(11)	(7)	(67)	(101)	(14)	(28)	(6)	(11)
	105	119	3	6	62	91	14	17	8	14
	144	142	17	5	76	101	14	21	5	11
1250	(125)	(131)	(10)	(6)	(69)	(96)	(14)	(19)	(7)	(13)
	114	116	10	7	79	92	10	17	8	14
	120	117	8	6	60	106	14	23	7	11
2500	(117)	(117)	(9)	(7)	(70)	(99)	(12)	(20)	(8)	(13)
	119	121	14	5	83	85	14	23	5	8
	117	104	9	11	56	82	16	26	10	13
5000	(118)	(113)	(12)	(8)	(70)	(84)	(15)	(25)	(8)	(11)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (732)	2-AA (1352)	NaN_3 (469)	2-AA (262)	AF-2 (1040)	2-AA (796)	AF-2 (466)	2-AA (464)	9-AA (434)	2-AA (221)