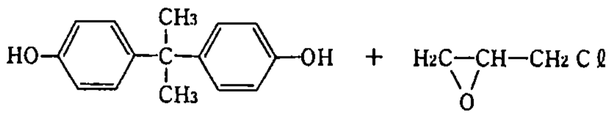
Epoxy resin intermediate(Reaction products of 4,4'-(1-methylethylidene)bisphenol and chloromethyloxirane)
(ビスフェノールA型エポキシ樹脂中間体)

Chemical Name: Epoxy resin intermediate (Reaction products of 4,4'-(1-methylethylidene) bisphenol and chloromethyloxirane)
Molecular weight:number average 370(n=0:340)
Melting point: ℃
Boiling point: ℃

Chemical Structure



CAS No : (25068-38-6)
MITI No: (7)-1283
Source of Substance:
Lot.No.:
Purity: %
Vehicle: DMSO

Mutagenicity
in Bacterial Test : Positive

IARC Evaluation : not yet cited

Experimental Data

Con. 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+
DSMO	(141)	(109)	(11)	(13)	(16)	(21)	(14)	(25)	(5)	(8)
	141	133	2	15	26	21	21	18	6	10
	143	138	9	15	21	21	9	16	8	8
0.305	(142)	(136)	(6)	(15)	(24)	(21)	(15)	(17)	(7)	(9)
	170	138	9	14	21	25	20	22	5	9
	178	148	13	7	13	32	16	17	7	9
1.22	(174)	(143)	(11)	(11)	(17)	(29)	(18)	(20)	(6)	(9)
	152	136	14	9	29	30	22	23	8	9
	172	142	14	6	21	24	22	22	2	8
4.88	(162)	(139)	(14)	(8)	(25)	(27)	(22)	(23)	(5)	(9)
	188	137	11	6	21	18	25	18	8	15
	176	133	16	7	31	21	21	30	8	10
19.5	(182)	(135)	(14)	(7)	(36)	(20)	(23)	(24)	(8)	(13)
	263	149	11	17	46	29	14	24	3	6
	258	159	16	14	36	31	14	30	6	5
78.1	(261)	(154)	(14)	(16)	(41)	(30)	(14)	(27)	(5)	(6)
	397	246	29	21	92	34	16	28	3	10
	406	256	32	13	90	45	21	16	6	10
313	(402)	(251)	(31)	(17)	(91)	(40)	(19)	(22)	(5)	(10)
	463	360	39	63	78	51	21	28	6	6
	466	314	36	52	86	41	10	30	5	7
1250	(465)	(337)	(38)	(58)	(82)	(46)	(16)	(29)	(6)	(7)
	498*	677	44*	112	98	152	16*	25	7*	5
	506*	700	39*	107	90	131	9*	31	5*	2
5000	(502*)	(689)	(42*)	(110)	(94)	(142)	(13*)	(28)	(6*)	(4)
	563*	667*	47*	138*	85	131	17*	16*	5*	6*
	547*	599*	51*	144*	92	143	17*	25*	5*	7*
10000	(555*)	(633*)	(49*)	(141*)	(89)	(137)	(17*)	(21*)	(5*)	(7*)
Judgement	+	+	+	+	+	+	−	−	−	−
Specific mutagenicity	834	454	63.9	36	320	20				
Positive Control	AF2 (1239)	2AA (1055)	NaN_3 (366)	2AA (268)	AF2 (211)	2AA (1466)	AF2 (493)	2AA (378)	9AA (1188)	2AA (136)

Experimental Data

Con. 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+
DSMO	(119)	(120)	(11)	(12)	(17)	(22)	(16)	(16)	(6)	(9)
					26					
					21					
19.5					(24)					
					24					
					26					
39.1					(25)					
	236	150	15	15	24	31				
	198	152	24	10	40	21				
78.1	(217)	(151)	(20)	(13)	(32)	(26)				
	329	174	18	14	56	34	16	18	7	14
	305	174	10	9	48	29	10	13	6	11
156	(317)	(174)	(14)	(12)	(52)	(32)	(13)	(16)	(7)	(13)
	389	222	31	10	55	17	11	20	7	13
	393	202	29	28	89	24	17	20	9	13
313	(391)	(212)	(30)	(19)	(72)	(21)	(14)	(20)	(8)	(13)
	395	209	37	30	77	22	24	11	5	8
	416	241	41	37	66	29	15	17	7	11
625	(406)	(225)	(39)	(34)	(72)	(26)	(20)	(14)	(6)	(10)
	433	266	40	53	68	40	16	31	9	8
	407	261	38	38	81	15	20	20	9	8
1250	(420)	(264)	(39)	(46)	(75)	(28)	(18)	(26)	(9)	(8)
	463	507	28	70		43	21	25	6	6
	447	384	38	55		47	14	21	5	3
2500	(455)	(446)	(33)	(63)		(45)	(18)	(23)	(6)	(5)

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	Experimental Data									
Con. 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+
	568*	682	38*	100		90	11*	26	2*	5
	503*	661	39*	94		78	15*	23	6*	7
5000	(536*)	(672)	(39*)	(97)		(84)	(13*)	(25)	(4*)	(6)
								23*	5*	7*
								14*	8*	6*
10000								(19*)	(7*)	(7*)
Judgement	+	+	+	+	+	+	−	−	−	−
Specific mutagenicity	1270	130	60.7	35.2	224	12.4				
Positive	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(844)	(835)	(330)	(187)	(174)	(612)	(207)	(426)	(1093)	(135)