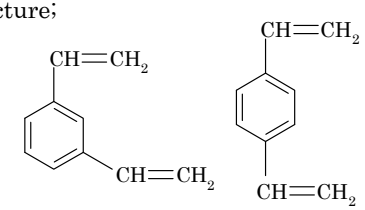
Divinylbenzene (ｼﾞﾋﾞﾆﾙﾍﾞﾝｾﾞﾝ;
1,3-ｼﾞﾋﾞﾆﾙﾍﾞﾝｾﾞﾝと1,4-ｼﾞﾋﾞﾆﾙﾍﾞﾝｾﾞﾝの混合物)

Chemical Name ; Divinylbenzene
Synoym ; －

Molecular Weight ; 130.19
Melting Point ; －
Boiling Point ; 195 ℃[Aldrich]
Flashing Point ; 61.7℃[Aldrich]
Molecular Formular; $C_{10}H_{10}$

Chemical Structure;



CAS No. ; 1321-74-0
METI No. ; (3)-14
MHLW No. ; －
Specified Chemical Substances;－

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; GJ01
Purity ; 99.0%

Vehicle ; DMSO

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＋
DMSO	(109)	(124)	(11)	(13)	(83)	(115)	(17)	(28)	(9)	(8)
1 .22	117 99 (108)	127 131 (129)	11 6 (9)	18 15 (17)	111 98 (105)	131 148 (140)	22 10 (16)	21 34 (28)	7 7 (7)	2 7 (5)
4 .88	117 108 (113)	121 116 (119)	11 9 (10)	17 14 (16)	99 94 (97)	141 135 (138)	16 9 (13)	20 28 (24)	5 6 (6)	6 9 (8)
19 .5	92 * 105 * (99 *)	123 139 (131)	6 * 5 * (6 *)	13 8 (11)	91 100 (96)	124 * 136 * (130 *)	9 11 (10)	23 26 (25)	8 * 2 * (5 *)	7 6 (7)
78 .1	0 * 0 * (0 *)	75 * 82 * (79 *)	0 * 0 * (0 *)	7 * 8 * (8 *)	0 * 0 * (0 *)	60 * 55 * (58 *)	0 * 0 * (0 *)	0 * 0 * (0 *)	0 * 0 * (0 *)	7 * 6 * (7 *)
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 * 0 * (0 *)	0 * 0 * (0 *)	0 * 0 * (0 *)	0 * 0 * (0 *)	0 * 0 * (0 *)	0 * 0 * (0 *)	0 * 0 * (0 *)
Judgement	－	－	－	－	－	－	－	－	－	－
Specific Mutagenicity										
Positive Control	AF-2 (678)	2-AA (1251)	NaN_3 (395)	2-AA (224)	AF-2 (1549)	2-AA (801)	AF-2 (413)	2-AA (463)	9-AA (210)	2-AA (227)

* Growth inhibition was observed.

Conc. μ g/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+
DMSO	(114)	(136)	(11)	(15)	(84)	(122)	(18)	(30)	(13)	(10)
	111		6				17		1	
	115		13				22		8	
0 .305	(113)	( )	(10)	( )	( )	( )	(20)	( )	(5)	( )
	129		14				11		3	
	105		11				11		3	
0 .610	(117)	( )	(13)	( )	( )	( )	(11)	( )	(3)	( )
	115	134	15	16	90	137	18	31	5	11
	107	137	13	14	100	135	17	24	6	21
1 .22	(111)	(136)	(14)	(15)	(95)	(136)	(18)	(28)	(6)	(16)
	108 *	127	7 *	5	85	129	21	17	0 *	14
	108 *	139	13 *	16	91	137	11	17	0 *	10
2 .44	(108 *)	(133)	(10 *)	(11)	(88)	(133)	(16)	(17)	(0 *)	(12)
	0 *	124 *	0 *	8 *	0 *	158	2 *	20 *	0 *	9
	0 *	106 *	0 *	11 *	0 *	106	11 *	34 *	0 *	9
4 .88	(0 *)	(115 *)	(0 *)	(10 *)	(0 *)	(132)	(7 *)	(27 *)	(0 *)	(9)
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	18 *	0 *	0 *
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	10 *	0 *	0 *
9 .77	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(14 *)	(0 *)	(0 *)
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	93 *	0 *	0 *
	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *
19 .5	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(0 *)	(47 *)	(0 *)	(0 *)
		0 *		0 *	0 *	0 *		0 *		0 *
		0 *		0 *	0 *	0 *		0 *		0 *
39 .1	( )	(0 *)	( )	(0 *)	(0 *)	(0 *)	( )	(0 *)	( )	(0 *)
		0 *		0 *	0 *	0 *		0 *		0 *
		0 *		0 *	0 *	0 *		0 *		0 *
78 .1	( )	(0 *)	( )	(0 *)	(0 *)	(0 *)	( )	(0 *)	( )	(0 *)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (740)	2-AA (1297)	NaN_3 (396)	2-AA (254)	AF-2 (1331)	2-AA (940)	AF-2 (402)	2-AA (488)	9-AA (225)	2-AA (217)

* Growth inhibition was observed.

Conc. μ g/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+
DMSO	(103)	(125)	(11)	(13)	(71)	(114)	(18)	(26)	(7)	(13)
	100		9				10		6	
	106		13				13		5	
0 .0381	(103)	( )	(11)	( )	( )	( )	(12)	( )	(6)	( )
	107		17				16		10	
	109		17				8		10	
0 .0763	(108)	( )	(17)	( )	( )	( )	(12)	( )	(10)	( )
	102	116	16	16	69	130	8	18	9	7
	92	130	16	21	59	131	9	18	10	6
0 .153	(97)	(123)	(16)	(19)	(64)	(131)	(9)	(18)	(10)	(7)
	109	109	11	13	69	135	15	24	20	9
	102	107	11	6	78	158	10	22	5	10
0 .305	(106)	(108)	(11)	(10)	(74)	(147)	(13)	(23)	(13)	(10)
	100	128	15	16	56	148	14	24	9	16
	104	129	14	11	82	143	18	20	9	13
0 .610	(102)	(129)	(15)	(14)	(69)	(146)	(16)	(22)	(9)	(15)
	115	107	14	14	54	135	15	14	7	7
	112	128	10	7	59	131	11	20	7	9
1 .22	(114)	(118)	(12)	(11)	(57)	(133)	(13)	(17)	(7)	(8)
	113	108	14	15	55	128	20	22	5	8
	105	120	16	23	64	143	15	24	8	15
2 .44	(109)	(114)	(15)	(19)	(60)	(136)	(18)	(23)	(7)	(12)
	117	121	14	22	67	126	16	20	9	6
	102	123	13	17	51	146	21	23	11	11
4 .88	(110)	(122)	(14)	(20)	(59)	(136)	(19)	(22)	(10)	(9)
	112	104	16	17	69	129	20	21	8	9
	99	126	8	13	56	123	14	21	18	10
9 .77	(106)	(115)	(12)	(15)	(63)	(126)	(17)	(21)	(13)	(10)
	114 *	123	6 *	9	64	141	11 *	30	5 *	7
	86 *	131	5 *	21	82	122	9 *	24	3 *	10
19 .5	(100 *)	(127)	(6 *)	(15)	(73)	(132)	(10 *)	(27)	(4 *)	(9)
		137 *		9 *	0 *	123		17 *		11
		122 *		8 *	0 *	114		18 *		6
39 .1	( )	(130 *)	( )	(9 *)	(0 *)	(119)	( )	(18 *)	( )	(9)
		0 *		9 *	0 *	68 *		0 *		5 *
		0 *		10 *	0 *	62 *		0 *		5 *
78 .1	( )	(0 *)	( )	(10 *)	(0 *)	(65 *)	( )	(0 *)	( )	(5 *)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (737)	2-AA (1227)	NaN_3 (356)	2-AA (199)	AF-2 (1460)	2-AA (821)	AF-2 (402)	2-AA (415)	9-AA (192)	2-AA (189)

* Growth inhibition was observed.

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+
DMSO	(100)	(108)	(10)	(9)	(72)	(105)	(13)	(19)	(9)	(7)
	89		13				13		8	
	90		11				10		7	
0 .610	(90)	( )	(12)	( )	( )	( )	(12)	( )	(8)	( )
	94	107	11	8	69		11	18	8	
	96	130	7	10	70		14	24	10	
1 .22	(95)	(119)	(9)	(9)	(70)	( )	(13)	(21)	(9)	( )
	105	131	7	7	61	113	21	15	5	6
	97	112	8	7	68	114	22	25	7	13
2 .44	(101)	(122)	(8)	(7)	(65)	(114)	(22)	(20)	(6)	(10)
	105	98	11	9	70	107	9	21	5	10
	98	108	11	10	66	97	13	15	3	11
4 .88	(102)	(103)	(11)	(10)	(68)	(102)	(11)	(18)	(4)	(11)
	101	107	11	13	57	104	10	23	6	10
	83	107	17	10	79	97	14	22	6	7
9 .77	(92)	(107)	(14)	(12)	(68)	(101)	(12)	(23)	(6)	(9)
	84 *	114	7 *	10	81	111	13 *	21	1 *	5
	85 *	112	8 *	7	59	96	14 *	28	7 *	11
19 .5	(85 *)	(113)	(8 *)	(9)	(70)	(104)	(14 *)	(25)	(4 *)	(8)
		92 *		2 *	33 *	86		16 *		10 *
		108 *		8 *	23 *	107		16 *		7 *
39 .1	( )	(100 *)	( )	(5 *)	(28 *)	(97)	( )	(16 *)	( )	(9 *)
						40 *				0 *
						40 *				0 *
78 .1	( )	( )	( )	( )	( )	(40 *)	( )	( )	( )	(0 *)
Judgement	−	−	−	−	−	−	−	−	−	−
Specific Mutagenicity										
Positive Control	AF-2 (648)	2-AA (1262)	NaN_3 (358)	2-AA (214)	AF-2 (1443)	2-AA (875)	AF-2 (396)	2-AA (447)	9-AA (210)	2-AA (202)

* Growth inhibition was observed.