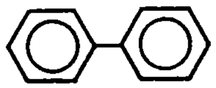
Diphenyl (ジフェニル)

Chemical Name: Diphenyl
Synonym: Biphenyl
1,1'-Biphenyl
Molecular weight: 154.20
Melting point: 69~72℃
Boiling point: 254~255℃

Chemical Structure



CAS No : 92-52-4
MITI No: (4)-13
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AZ01
Purity: 99.5 %
Vehicle: DMSO

Mutagenicity in Bacterial Test: Negative

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	(131)	(120)	(10)	(10)	(22)	(27)	(16)	(21)	(9)	(10)
			9						6	
			15						6	
0.98			(12)						(6)	
	112	119	8	9	17			29	7	7
	138	130	6	11	21			21	5	10
1.95	(125)	(125)	(7)	(10)	(19)			(25)	(6)	(9)
	123	137	7	9	15	20	6	22	6	8
	122	136	11	14	14	26	21	23	10	8
3.91	(123)	(137)	(9)	(12)	(15)	(23)	(14)	(23)	(8)	(8)
	100	160	13	15	16	28	18	18	9	6
	129	143	10	9	13	23	7	16	2	6
7.81	(115)	(152)	(12)	(12)	(15)	(26)	(13)	(17)	(6)	(6)
	105	145	8	10	23	16	20	22	7	10
	114	149	6	10	21	29	20	26	9	6
15.6	(110)	(147)	(7)	(10)	(22)	(23)	(20)	(24)	(8)	(8)
	94	131	2*	8	17	25	10	13	3*	2
	94	124	9*	5	17	31	15	18	6*	6
31.3	(94)	(128)	(6*)	(7)	(17)	(28)	(13)	(16)	(5*)	(4)
	87*	77*	2*	11*	15	28	15*	20	6*	7
	100*	86*	14*	13*	10	25	13*	17	7*	6
62.5	(94*)	(82*)	(8*)	(12*)	(13)	(27)	(14*)	(19)	(7*)	(7)
	77*	67*	9*	11*	18*	15	14*	22*	7*	11*
	78*	89*	6*	8*	24*	24	14*	20*	3*	11*
125	(78*)	(78*)	(8*)	(10*)	(21*)	(20)	(14*)	(21*)	(5*)	(11*)
	76*	77*		13*	15*	21*	9*	22*		3*
	62*	71*		6*	15*	22*	7*	9*		9*
250	(69*)	(74*)		(10*)	(15*)	(22*)	(8*)	(16*)		(6*)
						20*	10*			
						22*	7*			
500						(21*)	(9*)			
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2 (653)	2AA (1137)	NaN_3 (275)	2AA (241)	AF2 (184)	2AA 20 (1275)	AF2 (396)	2AA (478)	9AA (836)	2AA (142)

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	(145)	(150)	(11)	(9)	(20)	(27)	(32)	(32)	(7)	(8)
			7						7	
			9						2	
0.98			(8)						(5)	
	151	155	10	11			37		6	
	149	158	8	11			28		5	
1.95	(150)	(157)	(9)	(11)			(33)		(6)	
	146	156	15	6	20		25	29	6	10
	158	164	14	10	25		34	28	9	9
3.91	(152)	(160)	(15)	(8)	(23)		(30)	(29)	(8)	(10)
	122	153	9	10	26	28	18	34	5	10
	119	150	8	10	26	31	30	40	2	8
7.81	(121)	(152)	(9)	(10)	(26)	(30)	(24)	(37)	(4)	(9)
	98	174	8	16	23	33	36	39	9	6
	105	151	11	10	20	25	30	36	6	6
15.6	(102)	(163)	(10)	(13)	(22)	(29)	(33)	(38)	(8)	(6)
	107	139	10	6	11	40	16	49	5*	7
	100	111*	10	17	16	30	15	36	3*	11
31.3	(104)	(125*)	(10)	(12)	(14)	(35)	(16)	(43)	(4*)	(9)
	101	122*	11*	7*	26	32	18	33	6*	9
	99	102*	11*	13*	23	29	22*	24	3*	10
62.5	(100)	(112*)	(11*)	(10*)	(25)	(31)	(20*)	(29)	(5*)	(10)
	90*	94*		8*	29	26	11*	22		8*
	86*	76*		9*	22	28	16*	30		8*
125	(88*)	(85*)		(9*)	(26)	(27)	(14*)	(26)		(8*)
					14*	25		24*		11*
					18*	36		11*		6*
250					(16*)	(31)		(18*)		(9*)
						18*				
						33*				
500						(26*)				
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2 (775)	2AA (1081)	NaN_3 (340)	2AA (205)	AF2 (203)	2AA 20 (1327)	AF2 (453)	2AA (330)	9AA (758)	2AA (145)