

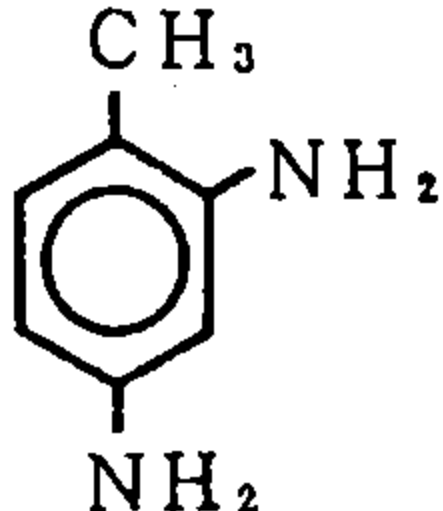
2,4-Diaminotoluene (2,4-ジアミノトルエン)

Experimental Data

Chemical Name: 2,4-Diaminotoluene
Synonym m-Toluidenediamine
 2,4-Toluenediamine
 1,3-Benzenediamine,
 4-methyl-

Molecular weight: 122.17
Melting point: 97 - 99 °C
Boiling point: 283 - 285°C

Chemical Structure



CAS No : 95-80-7
MITI No: (3)-126
Source of Substance: Tokyo Kasei Kogyo Co. Ltd
Lot. No. : FAY01
Purity: 99 %
Vehicle: DMSO

Mutagenicity
 in Bacterial Test : Positive

IARC Evaluation : G 2B

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	(180)	(129)	(13)	(11)	(31)	(35)	(15)	(24)	(8)	(10)
	166	105	8	16	30	24	17	7	6	8
	170	133	7	10	23	31	13	21	11	16
0.0763	(168)	(119)	(8)	(13)	(27)	(28)	(15)	(14)	(9)	(12)
	177	108	7	7	33	26	15	20	8	13
	207	137	15	15	28	41	16	21	6	5
0.305	(192)	(123)	(11)	(11)	(31)	(34)	(16)	(21)	(7)	(9)
	180	144	13	10	25	34	17	17	9	8
	180	128	10	16	30	47	16	17	6	8
1.22	(180)	(136)	(12)	(13)	(28)	(41)	(17)	(17)	(8)	(8)
	163	131	10	13	23	32	9	28	9	5
	157	143	10	10	33	44	16	26	11	13
4.88	(160)	(137)	(10)	(12)	(28)	(38)	(13)	(27)	(10)	(9)
	142	131	13	11	20	33	17	36	11	14
	169	148	11	15	34	33	14	44	8	11
19.5	(156)	(140)	(12)	(13)	(27)	(33)	(16)	(40)	(10)	(13)
	108	228	10	14	24	28	18	54	8	10
	162	212	14	22	33	36	16	59	9	22
78.1	(135)	(220)	(12)	(18)	(29)	(32)	(17)	(57)	(9)	(16)
	172	236	15	15	31	-	11	208	8	32
	211	198	11	8	26	34	11	236	8	22
313	(192)	(217)	(13)	(12)	(29)	(34)	(11)	(222)	(8)	(27)
	185	273	6	13	26	37	15	707	7	41
	187	225	10	18	30	47	17	635	7	46
1250	(186)	(249)	(8)	(16)	(28)	(42)	(16)	(671)	(7)	(44)
	185	286	7	13	32	36	25	1936	7	133
	187	335	6	3	22	33	20	1666	6	146
5000	(186)	(311)	(7)	(8)	(27)	(35)	(23)	(1801)	(7)	(140)
Judgement	-	+	-	-	-	-	-	+	-	+
Specific mutagenicity		36.4						633		54.3
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(1130)	(744)	(337)	(174)	(202)	(1060)	(461)	(404)	(198)	(189)

Experimental Data

Con. μ g/ 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	(157)	(148)	(11)	(13)	(17)	(15)	(11)	(17)	(10)	(8)
								17		
								20		
<u>19.5</u>								(19)		
								32		
								22		
<u>39.1</u>								(27)		
	131	249	13	14	15	20	13	44	7	17
	160	210	7	16	21	20	13	45	13	12
<u>78.1</u>	(146)	(230)	(10)	(15)	(18)	(20)	(13)	(45)	(10)	(15)
	147	289	6	20	13	21	13	54	9	14
	133	230	10	9	18	16	12	65	7	2
<u>156</u>	(140)	(260)	(8)	(15)	(16)	(19)	(13)	(60)	(8)	(8)
	128	313	12	10	20	15	18	163	5	20
	142	288	22	18	14	21	14	136	12	13
<u>313</u>	(135)	(301)	(17)	(14)	(17)	(18)	(16)	(150)	(9)	(17)
	139	301	7	21	15	15	12	269	3	32
	201	320	10	7	12	25	16	311	8	39
<u>625</u>	(170)	(311)	(9)	(14)	(14)	(20)	(14)	(290)	(6)	(36)
	172	251	10	22	18	29	10	457	2	49
	119	334	12	17	13	25	16	482	5	50
<u>1250</u>	(146)	(293)	(11)	(20)	(16)	(27)	(13)	(470)	(4)	(50)
	179	311	7	6	6	21	20		2	73
	155	299	9	13	23	21	12		8	62
<u>2500</u>	(167)	(305)	(8)	(10)	(15)	(21)	(16)		(5)	(68)
	165	282	10	5	21	12	20		10	87
	145	341	10	15	10	28	13		3	112
<u>5000</u>	(155)	(312)	(10)	(10)	(16)	(20)	(17)		(7)	(100)
Judgement	-	+	-	-	-	-	-	+	-	+
Specific mutagenicity		62.8						437		44.8
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA	AF2	2AA	9AA	2AA
Control	(913)	(854)	(233)	(299)	(176)	(815)	(387)	(311)	(193)	(163)