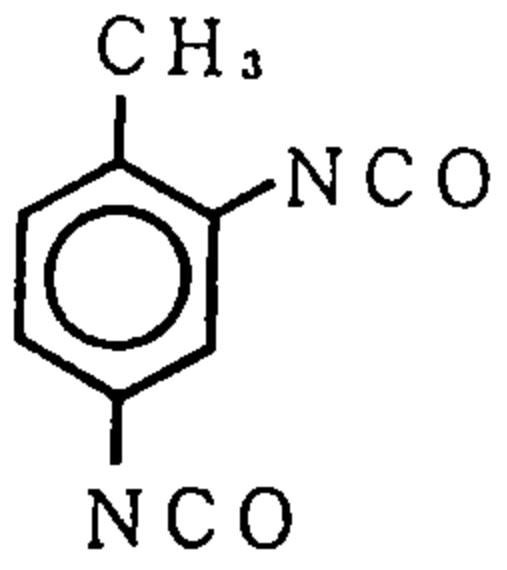


Toluene 2,4-diisocyanate (トルエン 2,4-ジイソシアナート)

Experimental Data

Chemical Name: Toluene 2,4-diisocyanate
 Synonym: Benzene, 2,4-diisocyanato-1-methyl-
 Molecular weight: 174.15
 Melting point: 19.5~21.5°C
 Boiling point: 251°C

Chemical Structure



CAS No : 584-84-9
 MITI No: (3)-2214
 Specified chemical substances: G2
 Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
 Lot.No. : AY01
 Purity: 98 %
 Vehicle: DSMO

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	(164)	(166)	(8)	(11)	(18)	(24)	(30)	(29)	(8)	(7)
	148	214	9	11	20	30	25	28	8	3
	145	192	8	10	18	33	23	37	8	5
20	(147)	(203)	(9)	(11)	(19)	(32)	(24)	(33)	(8)	(4)
	160	245	14	9	16	29	25	28	8	3
	167	235	15	23	16	28	31	33	10	6
39	(164)	(240)	(15)	(16)	(16)	(29)	(28)	(31)	(9)	(5)
	170	240	13	17	14	30	17	36	11	5
	220	243	-	16	20	26	24	39	7	8
78	(195)	(242)	(13)	(17)	(17)	(28)	(21)	(38)	(9)	(7)
	172	316	13	18	14	24	29	45	14	3
	143	295	10	9	16	26	22	51	14	7
156	(158)	(306)	(12)	(14)	(15)	(25)	(26)	(48)	(14)	(5)
	173	322	11	14	29	39	26	37	10	6
	160	295	15	17	24	29	26	26	6	10
313	(167)	(309)	(13)	(16)	(27)	(34)	(26)	(32)	(8)	(8)
	178	325	14	10	8	37	16	49	14	3
	144	318	17	-	21	32	24	30	9	7
625	(161)	(322)	(16)	(10)	(15)	(35)	(20)	(40)	(12)	(5)
	152	307	9	15	22	18	29	41	11	7
	139	316	14	14	22	36	24	27	11	8
1250	(146)	(312)	(12)	(15)	(22)	(27)	(27)	(34)	(11)	(8)
	151	264	11	15	21	26	24	19	18	9
	145	-	11	10	20	22	23	35	12	9
2500	(148)	(264)	(11)	(13)	(21)	(24)	(24)	(27)	(15)	(9)
	118	212	15	14	15	21	32	31	8	3
	115	221	5	12	16	24	29	25	7	4
5000	(117)	(217)	(10)	(13)	(16)	(23)	(31)	(28)	(8)	(4)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
Control	(522)	(828)	(277)	(158)	(141)	(1082)	(369)	(303)	(515)	(157)

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	(172)	(163)	(10)	(10)	(16)	(19)	(30)	(28)	(7)	(7)
	177	252	7	10	17	23	38	32	7	2
20	163 (170)	239 (246)	7 (7)	10 (10)	20 (19)	21 (22)	33 (36)	26 (29)	8 (8)	8 (5)
		248		11		26		22		3
40		261 (255)		13 (12)		22 (24)		40 (31)		6 (5)
	160		11		15		23		7	
50	159 (160)		13 (12)		10 (13)		29 (26)		9 (8)	
		247		10		26		23		13
60		258 (253)		14 (12)		25 (26)		37 (30)		3 (8)
		253		7		32		47		5
80		272 (263)		5 (6)		28 (30)		37 (42)		3 (4)
	205	299	11	10	16	29	32	45	7	7
100	187 (196)	309 (304)	14 (13)	5 (8)	11 (14)	33 (31)	39 (36)	38 (42)	5 (6)	11 (9)
	164	340	7	3	9	28	28	32	14	9
200	157 (161)	353 (347)	9 (8)	5 (4)	14 (12)	28 (28)	22 (25)	34 (33)	8 (11)	7 (8)
		413		5		28		48		7
400		389 (401)		8 (7)		24 (26)		41 (45)		11 (9)
	177		3		15		22		6	
500	158 (168)		8 (6)		8 (12)		24 (23)		10 (8)	
		382		9		31		34		9
600		380 (381)		6 (8)		26 (29)		36 (35)		0 (5)
		385		11		26		38		3
800		416 (401)		8 (10)		33 (30)		44 (41)		7 (5)
	169	406	8	6	13	26	21	38	3	5
1000	188 (179)	421 (414)	8 (8)	14 (10)	15 (14)	25 (26)	33 (27)	34 (36)	3 (3)	7 (6)
	149		5		11		21		7	
2000	140 (145)		8 (7)		10 (11)		20 (21)		6 (7)	
	126		7		6		19		4	
5000	125 (126)		7 (7)		8 (7)		25 (22)		5 (5)	
Judgement	-	+	-	-	-	-	-	-	-	-
Specific Mutagenicity		920								
Positive Control	AF2 (550)	2AA (677)	NaN ₃ (211)	2AA (151)	AF2 (136)	2AA 20 (1257)	AF2 (397)	2AA (379)	9AA (489)	2AA (142)