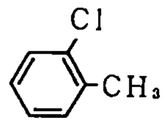
o-Chlorotoluene (o-クロロトルエン)

Chemical Name: o-Chlorotoluene
Synonym: 1-Chloro-2-methylbenzene
Benzene, 1-chloro-2-methyl-
Molecular weight: 126.59
Melting point: -35 ℃
Boiling point: 157 - 159℃
Flashing point: 47 ℃
Chemical Structure



CAS No : 95-49-8
MITI No: (3)-39
Source of Substance:Tokyo Kasei Kogyo Co Ltd
Lot.No. : AW01
Purity : 98 %
Vehicle : DMSO

Mutagenicity
in Bacterial Test : Negative

IARC Evaluation : G 2 B

Experimental Data

Number of Revertants/plate

Con. μg/plate	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(96)	(104)	(14)	(14)	(35)	(44)	(17)	(27)	(7)	(11)
	109	109	11	10	31	41	28	34	9	13
	98	101	9	15	28	39	22	24	8	10
0.0763	(104)	(105)	(10)	(13)	(30)	(40)	(25)	(29)	(9)	(12)
	94	122	21	18	22	36	24	23	7	9
	106	142	16	9	33	51	17	28	11	14
0.305	(100)	(132)	(19)	(14)	(28)	(44)	(21)	(26)	(9)	(12)
	86	108	10	15	29	33	24	29	9	13
	81	89	16	9	36	30	22	29	3	9
1.22	(84)	(99)	(13)	(12)	(33)	(32)	(23)	(29)	(6)	(11)
	123	90	18	16	32	49	16	16	9	9
	114	94	11	14	39	53	21	29	6	15
4.88	(119)	(92)	(15)	(15)	(36)	(51)	(19)	(23)	(8)	(12)
	119	111	17	6	29	41	16	31	7	7
	86	99	7	7	32	32	14	32	9	10
19.5	(103)	(105)	(12)	(7)	(31)	(37)	(15)	(32)	(8)	(9)
	68*	114	14*	14	33*	37	17*	29	11*	7
	74*	117	6*	14	21*	37	15*	22	9*	15
78.1	(71*)	(116)	(10*)	(14)	(27*)	(37)	(12*)	(26)	(10*)	(11)
	0*	77	0*	14*	7*	15*	0*	22*	0*	6*
	0*	81	0*	17*	16*	17*	0*	7*	0*	6*
313	(0*)	(79)	(0*)	(16*)	(12*)	(16*)	(0*)	(15*)	(0*)	(6*)
						17*				
						15*				
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(16*)	(0*)	(0*)	(0*)	(0*)
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity (Positive Control)	AF2	2AA	NaN3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(623)	(1045)	(388)	(294)	(254)	(888)	(431)	(310)	(432)	(156)

Con. μg/plate	Experimental Data: Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2uvrA		TA98		TA1537	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(107)	(122)	(13)	(16)	(22)	(28)	(17)	(23)	(8)	(11)
	105		11		17		16		10	
	108		11		24		13		7	
2.44	(107)		(11)		(21)		(15)		(9)	
	100		11		28		20		10	
	101		11		18		9		8	
4.88	(101)		(11)		(23)		(15)		(9)	
	101	106	11	17	18	21	17	33	9	3
	100	124	9	9	22	21	17	22	6	6
9.77	(101)	(115)	(10)	(13)	(20)	(21)	(17)	(28)	(8)	(5)
	97	98	13	17	22	24	18	17	5	14
	149	114	11	13	23	31	22	23	6	11
19.5	(123)	(106)	(12)	(15)	(23)	(28)	(20)	(20)	(6)	(13)
	100	119	8	15	22	31	22	29	9	10
	106	105	14	17	21	34	9	21	13	8
39.1	(103)	(112)	(11)	(16)	(22)	(33)	(16)	(25)	(11)	(9)
	93*	108	14*	9	15*	24	13*	17	6*	14
	89*	122	6*	9	31*	41	11*	23	7*	10
78.1	(91*)	(115)	(10*)	(9)	(23*)	(33)	(12*)	(20)	(7*)	(12)
	69*	93*	7*	13*	20*	29*	11*	21*	9*	13*
	78*	79*	3*	8*	17*	25*	8*	14*	5*	7*
156	(74*)	(86*)	(5*)	(11*)	(19*)	(27*)	(10*)	(18*)	(7*)	(10*)
		76*		6*		11*		15*		8*
		91*		11*		20*		16*		9*
313		(84*)		(9*)		(16*)		(16*)		(9*)
		61*		9*		13*		20*		8*
		47*		6*		15*		15*		7*
625		(54*)		(8*)		(14*)		(18*)		(8*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity										
Positive Control	AF2	2AA	NaN3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(972)	(1245)	(331)	(271)	(275)	(971)	(403)	(351)	(548)	(170)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(296)	(361)	(342)	(361)	(293)	(267)
	280	322	314	371	195	238
	268	328	350	384	171	286
0.0763	(274)	(325)	(332)	(378)	(183)	(262)
	286	336	323	401	186	266
	274	358	312	404	185	252
0.305	(280)	(347)	(318)	(403)	(186)	(259)
	260	352	346	373	206	248
	287	359	364	365	205	247
1.22	(274)	(356)	(355)	(369)	(206)	(248)
	301	394	332	373	178	230
	265	354	329	382	193	216
4.88	(288)	(374)	(331)	(378)	(186)	(223)
	263*	364	301*	412	211	293
	290*	377	317*	390	213	239
19.5	(277*)	(371)	(309*)	(401)	(212)	(266)
	267*	383	317*	361	166	234
	298*	323	297*	390	200	228
78.1	(283*)	(353)	(307*)	(376)	(183)	(231)
	136*	193*	256*	294*	128*	165*
	126*	185*	271*	285*	137*	134*
313	(131*)	(189*)	(264*)	(290*)	(133*)	(150*)
	0*	93*	0*	0*	0*	121*
	0*	114*	0*	0*	0*	111*
1250	(0*)	(104*)	(0*)	(0*)	(0*)	(116*)
		0*		0*		0*
		0*		0*		0*
5000		(0*)		(0*)		(0*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity Positive Control	BLM	2AA	PA	2AA	AF2	2AA
	(948)	(2567)	(1789)	(1072)	(3000)	(1040)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(247)	(317)	(267)	(355)	(164)	(241)
	249		219			
	249		242			
0.610	(249)		(231)			
	240		248			
	258		275			
1.22	(249)		(262)			
	234		248			
	221		243			
2.44	(228)		(246)			
	246		248			
	241		254			
4.88	(244)		(251)			
	254	298	258	364	145	241
	229	311	238	364	174	247
9.77	(242)	(305)	(248)	(364)	(160)	(244)
	226*	314	243*	394	191	256
	256*	355	268*	373	177	273
19.5	(241*)	(335)	(256*)	(384)	(184)	(265)
	228*	300	253*	330	200	211
	235*	316	280*	346	204	227
39.1	(232*)	(308)	(267*)	(338)	(202)	(219)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
		320		282	155	250
		294		325	190	219
78.1		(307)		(304)	(173)	(235)
		255*		234*	113*	223
		204*		341*	82*	213
156		(230*)		(288*)	(98*)	(218)
		208*		229*	84*	112*
		208*		205*	83*	121*
313		(208*)		(217*)	(84*)	(117*)
		179*		183*	86*	86*
		190*		176*	72*	75*
625		(185*)		(180*)	(79*)	(81*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity Positive Control	BLM	2AA	PA	2AA	AF2	2AA
	(765)	(2078)	(1311)	(1010)	(2308)	(1253)