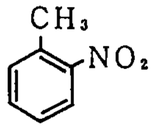
o-Nitrotoluene (o-ニトロトルエン)

Chemical Name: o-Nitrotoluene
Synonym: o-Methylnitrobenzene
Benzene, 1-methyl-2-nitro-
Molecular weight: 137.14
Melting point: -10~-3℃
Boiling point: 222.3~225℃
Flashing point: 106℃
Chemical Structure



CAS No : 88-72-2
MITI No: (3)-437
Source of Substance:Tokyo Kasei Kogyo Co.Ltd
Lot.No. : GA01
Purity : 99 %
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+
DMSO	(124)	(122)	(12)	(14)	(31)	(32)	(19)	(18)	(8)	(15)
	129	134	11	16	43	40	24	24	9	16
	130	116	11	18	37	36	16	30	15	20
0.0763	(130)	(125)	(11)	(17)	(40)	(38)	(20)	(27)	(12)	(18)
	115	131	11	11	30	39	16	25	8	16
	148	115	17	13	33	39	17	31	10	9
0.305	(132)	(123)	(14)	(12)	(32)	(39)	(17)	(28)	(9)	(13)
	112	141	20	14	43	44	23	24	10	8
	117	117	15	14	34	30	22	20	8	15
1.22	(115)	(129)	(18)	(14)	(39)	(37)	(23)	(22)	(9)	(12)
	97	128	14	13	23	37	16	22	14	14
	107	130	15	18	23	46	15	36	10	14
4.88	(102)	(129)	(15)	(16)	(23)	(42)	(16)	(29)	(12)	(14)
	124	143	15	9	43	37	18	26	7	9
	117	109	10	22	25	29	21	16	7	13
19.5	(121)	(126)	(13)	(16)	(34)	(33)	(20)	(21)	(7)	(11)
	137	133	7	10	26	36	21	26	10	13
	117	114	7	14	37	29	16	22	10	14
78.1	(127)	(124)	(7)	(12)	(32)	(33)	(19)	(24)	(10)	(14)
	121*	151	13*	13	40	37	24*	33	8*	15
	97*	143	10*	13	33	46	15*	30	8*	6
313	(109*)	(147)	(12*)	(13)	(37)	(42)	(20*)	(32)	(8*)	(11)
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity Positive Control	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(801)	(1084)	(277)	(280)	(270)	(818)	(485)	(334)	(498)	(181)

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	(128)	(135)	(19)	(20)	(29)	(27)	(21)	(29)	(9)	(8)
	116	135	15	18	26	23	17	23	7	17
	139	109	31	22	26	24	17	24	7	9
9.77	(128)	(122)	(23)	(20)	(26)	(24)	(17)	(24)	(7)	(13)
	133	134	15	14	31	28	14	29	7	11
	149	134	21	16	20	32	16	34	11	10
19.5	(141)	(134)	(18)	(15)	(26)	(30)	(15)	(32)	(9)	(11)
	133	163	23	25	18	30	14	19	8	14
	131	151	14	24	23	26	16	38	7	6
39.1	(132)	(157)	(19)	(25)	(21)	(28)	(15)	(34)	(8)	(10)
	126	122	18	22	21	18	18	33	6	10
	121	156	26	21	21	28	16	29	8	10
78.1	(124)	(139)	(22)	(22)	(21)	(23)	(17)	(31)	(7)	(10)
	116	117	17	21	17	38	21	29	11	11
	153	107	13	23	17	30	17	18	8	16
156	(135)	(112)	(15)	(22)	(17)	(34)	(19)	(24)	(10)	(14)
	83*	0*	6*	0*	0*	0*	18*	0*	13*	0*
	94*	0*	13*	0*	0*	0*	14*	0*	9*	0*
313	(89*)	(0*)	(10*)	(0*)	(0*)	(0*)	(16*)	(0*)	(11*)	(0*)
625	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific Mutagenicity Positive Control	AF2	2AA	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA
	(722)	(1176)	(254)	(255)	(277)	(711)	(454)	(336)	(365)	(170)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(249)	(324)	(254)	(354)	(163)	(250)
	213	347	262	358	142	219
	220	306	216	350	158	240
0.0763	(217)	(327)	(239)	(354)	(150)	(230)
	226	374	266	370	173	238
	242	348	265	347	133	252
0.305	(234)	(361)	(266)	(359)	(153)	(245)
	229	329	240	365	162	229
	260	335	245	355	166	225
1.22	(245)	(332)	(243)	(360)	(164)	(227)
	229	350	258	380	151	240
	254	318	280	358	166	234
4.88	(242)	(334)	(269)	(369)	(159)	(237)
	254	319	240	382	150	240
	230	348	248	380	152	250
19.5	(242)	(334)	(244)	(381)	(151)	(245)
	195	341	248	349	148	230
	236	330	249	298	123	241
78.1	(216)	(336)	(249)	(324)	(136)	(236)
	218	309	252	287	163	230
	242	334	247	287	173	228
313	(230)	(322)	(250)	(287)	(168)	(229)
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity (Positive Control)	BLM (1025)	2AA (2835)	PA (3314)	2AA (1469)	AF2 (3316)	2AA (1272)

Con. μg/plate	Experimental Data: Number of Revertants/plate, Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(224)	(311)	(236)	(299)	(152)	(222)
	252	287	227	294	143	204
	222	307	202	314	144	197
19.5	(237)	(297)	(215)	(304)	(144)	(201)
	185	318	206	259	145	211
	215	382	227	311	156	213
39.1	(200)	(300)	(217)	(285)	(151)	(212)
	226	279	234	305	150	201
	228	325	226	291	153	200
78.1	(227)	(302)	(230)	(298)	(152)	(201)
	238	300	214	274	149	209
	240	295	211	252	145	218
156	(239)	(298)	(213)	(263)	(147)	(214)
	208	279	192	263	144	184
	201	304	225	249	150	216
313	(205)	(292)	(209)	(256)	(147)	(200)
	0*	0*	0*	0*	0*	94*
	0*	0*	0*	0*	0*	70*
625	(0*)	(0*)	(0*)	(0*)	(0*)	(82*)
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	—	—	—	—	—	—
Specific Mutagenicity						
Positive Control	BLM	2AA	PA	2AA	AF2	2AA
	(913)	(1826)	(1607)	(1024)	(2716)	(965)