1-Nitropropane (1-ニトロプロパン)

Chemical Name: 1-Nitropropane
Synonym Nitropropane
Molecular weight: 89.09
Melting point: -108℃
Boiling point: 131~132℃
Flashing point: 33~36℃
Chemical Structure

$CH_3CH_2CH_2NO_2$

CAS No : 108-03-2
ML No: 2-(10)-194
Source of Substance:Tokyo Kasei Kogyo Co.Ltd
Lot.No.: AN01
Purity: 98 %
Vehicle: DMSO

Mutagenicity
in Bacterial Test : Negative

IARC Overall 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	(135)	(138)	(12)	(11)	(20)	(27)	(12)	(16)	(7)	(8)
	148	127	8	15	28	18	6	12	6	5
	140	128	10	17	21	19	13	8	6	8
0.0763	(144)	(128)	(9)	(16)	(25)	(19)	(10)	(10)	(6)	(7)
	153	149	7	10	29	30	13	10	7	5
	154	148	8	9	27	35	10	15	7	6
0.305	(154)	(149)	(8)	(10)	(28)	(33)	(12)	(13)	(7)	(6)
	153	158	5	17	22	30	9	14	8	6
	165	96	10	9	24	30	15	20	5	6
1.22	(159)	(127)	(8)	(13)	(23)	(30)	(12)	(17)	(7)	(6)
	129	128	13	22	28	36	8	20	7	6
	123	138	12	14	28	24	21	13	10	3
4.88	(126)	(133)	(13)	(18)	(28)	(30)	(15)	(17)	(9)	(5)
	143	113	7	7	28	22	10	20	5	8
	135	119	12	7	23	28	8	8	9	5
19.5	(139)	(116)	(10)	(7)	(26)	(25)	(9)	(14)	(7)	(7)
	120	142	5	12	32	31	12	16	3	6
	142	160	9	10	30	23	12	20	7	6
78.1	(131)	(151)	(7)	(11)	(31)	(27)	(12)	(18)	(5)	(6)
	139	160	10	17	23	20	10	13	10	5
	142	133	2	16	34	32	12	16	17	7
313	(141)	(147)	(6)	(17)	(29)	(26)	(11)	(15)	(14)	(6)
	129	121	16	8	28	37	9	28	8	14
	149	131	13	15	13	37	13	17	3	9
1250	(139)	(126)	(15)	(12)	(21)	(37)	(11)	(23)	(6)	(12)
	124	143	9	9	29	30	17	23	8	16
	150	126	20	8	31	31	8	14	6	6
5000	(137)	(135)	(15)	(9)	(30)	(31)	(13)	(19)	(7)	(11)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific mutagenicity										
Positive Control	AF2 (1040)	2AA (879)	NaN_3 (207)	2AA (310)	AF2 (166)	2AA (927)	AF2 (387)	2AA (315)	9AA (191)	2AA (188)

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	(98)	(94)	(11)	(12)	(18)	(24)	(6)	(12)	(8)	(11)
	102	102	6	9	23	31	5	15	5	8
	103	125	17	17	29	31	13	13	6	6
156	(103)	(114)	(12)	(13)	(26)	(31)	(9)	(14)	(6)	(7)
	105	109	9	12	30	21	6	12	8	8
	89	106	9	8	15	21	8	14	5	7
313	(97)	(108)	(9)	(10)	(23)	(21)	(7)	(13)	(7)	(8)
	109	116	7	14	17	23	6	9	6	8
	114	104	13	15	27	29	8	10	5	14
625	(112)	(110)	(10)	(15)	(22)	(26)	(7)	(10)	(6)	(11)
	117	90	2	10	25	29	10	7	2	7
	80	112	3	6	20	27	2	9	15	8
1250	(99)	(101)	(3)	(8)	(23)	(28)	(6)	(8)	(9)	(8)
	88	99	12	12	25	37	3	12	16	7
	90	105	8	9	24	23	7	8	8	18
2500	(89)	(102)	(10)	(11)	(25)	(30)	(5)	(10)	(12)	(13)
	61	98	6	12	34	34	3	7	5	9
	73	76	6	12	10	30	8	17	8	9
5000	(67)	(87)	(6)	(12)	(22)	(32)	(6)	(12)	(7)	(9)
Judgement	—	—	—	—	—	—	—	—	—	—
Specific mutagenicity										
Positive Control	AF2 (666)	2AA (682)	NaN_3 (177)	2AA (297)	AF2 (172)	2AA (920)	AF2 (295)	2AA (242)	9AA (196)	2AA (156)

Experimental Data

Con. μg/plate	Number of Revertants/plate Frame-shift TA1537 S9-	S9+
DSMO	(12)	(9)
	18	18
	5	12
156	(12)	(15)
	18	10
	9	22
313	(14)	(16)
	23	17
	13	9
625	(18)	(13)
	14	16
	10	10
1250	(12)	(13)
	10	13
	7	15
2500	(9)	(14)
	7	10
	14	14
5000	(11)	(12)
Judgement	—	—
Specific mutagenicity		

Positive Control	9AA	2AA
	(431)	(195)

Experimental Data

Con. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DSMO	(243)	(279)	(249)	(327)	(108)	(154)
	205	250	237	317	105	170
	250	252	225	313	92	141
0.0763	(228)	(251)	(231)	(315)	(99)	(156)
	258	244	238	339	114	188
	243	258	279	318	95	142
0.305	(251)	(251)	(259)	(329)	(105)	(165)
	229	249	240	325	111	151
	232	291	280	336	89	150
1.22	(231)	(270)	(260)	(331)	(100)	(151)
	237	282	314	366	111	173
	224	287	275	328	104	139
4.88	(231)	(285)	(295)	(347)	(108)	(156)
	222	282	286	342	87	181
	234	258	255	309	99	151
19.5	(228)	(270)	(271)	(326)	(93)	(166)
	234	236	264	353	94	140
	227	268	258	317	96	156
78.1	(231)	(252)	(261)	(335)	(95)	(148)
	225	244	235	326	89	145
	222	269	288	341	80	142
313	(224)	(257)	(262)	(334)	(85)	(144)
	229	260	229	306	105	145
	250	275	247	338	92	170
1250	(240)	(268)	(238)	(332)	(99)	(158)
	238	260	234	320	109	150
	209	262	222	307	109	154
5000	(224)	(261)	(228)	(314)	(109)	(152)
Judgement	—	—	—	—	—	—
Specific mutagenicity						
Positive Control	BLM (567)	2AA (1077)	PA (3643)	2AA (1624)	AF2 (2543)	2AA (614)

Experimental Data

Con. μg/plate	Number of Revertants/plate					
	Base-substitution					
	TA102		TA104		WP2uvrA/pKM101	
	S9-	S9+	S9-	S9+	S9-	S9+
DSMO	(311)	(312)	(280)	(363)	(113)	(165)
	269	348	307	343	123	165
	288	339	313	357	132	141
156	(279)	(344)	(310)	(350)	(128)	(153)
	318	325	304	402	127	164
	326	353	316	323	131	158
313	(322)	(339)	(310)	(363)	(129)	(161)
	290	349	279	344	109	164
	305	354	303	391	116	148
625	(298)	(352)	(291)	(368)	(113)	(156)
	283	353	290	317	110	176
	258	281	305	343	140	162
1250	(271)	(317)	(298)	(330)	(125)	(169)
	286	306	286	369	153	157
	269	319	279	306	132	176
2500	(278)	(313)	(283)	(338)	(143)	(167)
	273	312	326	296	121	138
	259	329	289	334	142	165
5000	(266)	(321)	(308)	(315)	(132)	(152)
Judgement	—	—	—	—	—	—
Specific mutagenicity						
Positive Control	BLM (865)	2AA (1507)	PA (2706)	2AA (1624)	AF2 (2529)	2AA (840)