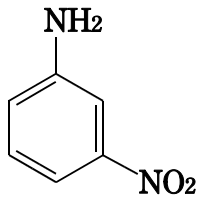
m-Nitroaniline
【*m*-ニトロアニリン】

Chemical Name; *m*-Nitroaniline
Synonym ; 3-Nitroaniline
3-Nitrobenzenamine
C.I. Azoic Diazo Component 7
C.I. 37030
3-ニトロアニリン
3-ニトロベンゼナミン
アゾイック DC 7

Molecular Weight ; 138.13
Melting Point ; 114 ℃ [CHCD, Merck]
112 - 114 ℃ [Aldrich]
Boiling Point ; 306 ℃ [Merck]
Flashing Point ; — ℃
Molecular Formula; $C_6H_6N_2O_2$

Chemical Structure



CAS No. ; 99-09-2
MITI No. ; (3)-392 , (5)-4676
ML No. ; —
Specified Chemical Substances; —

Source of Substance; Tokyo Kasei Kogyo Co.,Ltd.
Lot No. ; FHA01
Purity ; 99.9 %

Vehicle ; DMSO

Mutagenicity in Bacterial Test ; **Positive**

IARC Evaluation ; not yet cited

Experimental Data - 1

Conc. μg/plate	Number of Revertants/plate			
	Base-substitution		Frame-shift	
	TA100		TA98	
	S9−	S9＋	S9−	S9＋
DMSO	(143)	(153)	(20)	(28)
	149	162	22	29
	145	143	23	36
0.0763	(147)	(153)	(23)	(33)
	150	160	21	39
	162	143	17	23
0.305	(156)	(152)	(19)	(31)
	137	149	14	37
	151	162	26	28
1.22	(144)	(156)	(20)	(33)
	121	155	16	25
	135	142	23	24
4.88	(128)	(149)	(20)	(25)
	159	155	16	37
	163	190	24	43
19.5	(161)	(173)	(20)	(40)
	148	247	32	116
	149	201	21	102
78.1	(149)	(224)	(27)	(109)
	184	293	37	1114
	176	318	48	780
313	(180)	(306)	(43)	(947)
	250	526	157	2821
	212	496	151	2374
1250	(231)	(511)	(154)	(2598)
	405	143*	744	1200*
	376	134*	698	1016*
5000	(391)	(139*)	(721)	(1108*)
Judgement	＋	＋	＋	＋
Specific Mutagenicity	**49.6**	**489**	**140**	**2940**
Positive Control	AF-2 (725)	2-AA (1045)	AF-2 (498)	2-AA (269)

Experimental Data - 2 (B9314-1/1)

Conc. μg/plate	Number of Revertants/plate			
	Base-substitution		Frame-shift	
	TA100		TA98	
	S9−	S9＋	S9−	S9＋
DMSO	(135)	(150)	(21)	(30)
				29
				25
4.88				(27)
				25
				30
9.77				(28)
		160		43
		148		30
19.5		(154)		(37)
		185	18	48
		141	18	30
39.1		(163)	(18)	(39)
	165	209	23	114
	162	199	21	99
78.1	(164)	(204)	(22)	(107)
	176	191	26	317
	143	230	33	303
156	(160)	(211)	(30)	(310)
	187	212	49	1053
	167	262	48	1065
313	(177)	(237)	(49)	(1059)
	205	393	61	2372
	197	355	71	2297
625	(201)	(374)	(66)	(2335)
	249	487	135	
	248	480	143	
1250	(249)	(484)	(139)	
	325		268	
	322		255	
2500	(324)		(262)	
	465		639	
	401		657	
5000	(433)		(648)	
Judgement	＋	＋	＋	＋
Specific Mutagenicity	**75.6**	**358**	**125**	**3690**
Positive Control	AF-2 (654)	2-AA (1094)	AF-2 (551)	2-AA (281)