

2-Amino-5-nitrobenzonitrile

Experimental Data - 1

Experimental Data - 2

(B9303-1/1)

[2-アミノ-5-ニトロベンゾニトリル]

Chemical Name; 2-Amino-5-nitrobenzonitrile

Synonym ; 2-Cyano-4-nitroaniline

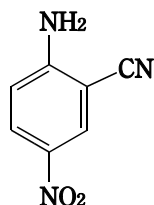
5-Nitroanthranilonitrile

2-シアノ-4-ニトロアニリン

5-ニトロアンソラニロニトリル

Molecular Weight ; 163.14
 Melting Point ; 200 - 207 °C [Aldrich]
 Boiling Point ; - °C
 Flashing Point ; - °C
 Molecular Formula; C₇H₅N₃O₂

Chemical Structure



CAS No. ; 17420-30-3

MITI No. ; (3)-1806

ML No. ; -

Specified Chemical Substances; -

Source of Substance; Aldrich Chemical Co., Inc.

Lot No. ; 12122TZ

Purity ; 97 %

Vehicle ; DMSO

Conc. μg/plate	Number of Revertants/plate			
	Base-substitution		Frame-shift	
	TA100		TA98	
	S9-	S9+	S9-	S9+
DMSO	(148)	(151)	(20)	(30)
	158	135	24	30
	137	145	29	23
0.0763	(148)	(140)	(27)	(27)
	149	136	34	21
	167	158	32	26
0.305	(158)	(147)	(33)	(24)
	151	157	109	30
	170	146	130	32
1.22	(161)	(152)	(120)	(31)
	200	156	422	44
	205	136	414	33
4.88	(203)	(146)	(418)	(39)
	388	145	1744	121
	361	169	1634	133
19.5	(375)	(157)	(1689)	(127)
	1217	341	4961	2051
	1128	353	4466	1827
78.1	(1173)	(347)	(4714)	(1939)
	2915	1698	4345	4095
	2912	1705	3846	4909
313	(2914)	(1702)	(4096)	(4502)
	616*	2461	385*	1274
	513*	2727	432*	1222
1250	(565*)	(2594)	(409*)	(1248)
	0*	0*	0*	0*
	0*	0*	0*	0*
5000 †	(0*)	(0*)	0*)	(0*)
Judgement	+	+	+	+
Specific Mutagenicity	13100	4960	85600	24400
Positive Control	AF-2 (721)	2-AA (1041)	AF-2 (502)	2-AA (264)

† Test chemical was precipitated.

Mutagenicity in Bacterial Test ; **Positive**

IARC Evaluation ; not yet cited

Conc. μg/plate	Number of Revertants/plate			
	Base-substitution		Frame-shift	
	TA100		TA98	
	S9-	S9+	S9-	S9+
DMSO	(134)	(151)	(22)	(30)
			31	
			28	
0.153			(30)	
			52	
			36	
0.305			(44)	
			55	
			53	
0.610			(54)	
	186	160	111	38
	146	155	113	37
1.22	(166)	(158)	(112)	(38)
	156	155	209	37
	198	165	181	30
2.44	(177)	(160)	(195)	(34)
	219	165	438	52
	184	156	471	48
4.88	(202)	(161)	(455)	(50)
	284	160	820	64
	243	153	856	55
9.77	(264)	(157)	(838)	(60)
	418	169	1598	194
	387	195	1696	183
19.5	(403)	(182)	(1647)	(189)
	687	212	3093	547
	677	188	3510	532
39.1	(682)	(200)	(3302)	(540)
	1225	416		2146
	1289	347		2212
78.1	(1257)	(382)		(2179)
	2216	1063		6608
	2429	1050		6280
156	(2323)	(1057)		(6444)
Judgement	+	+	+	+
Specific Mutagenicity	14400	5810	88700	41100
Positive Control	AF-2 (645)	2-AA (1095)	AF-2 (550)	2-AA (281)