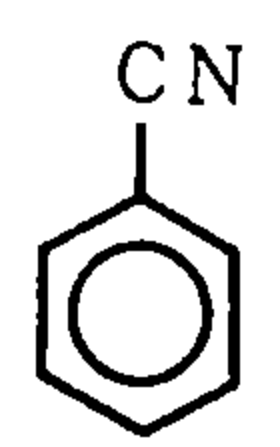


Benzonitrile (ベンゾニトリル)

Experimental Data

Chemical Name: Benzonitrile
 Synonym: Cyanobenzene
 Molecular weight: 103.12
 Melting point: -12.8~-13°C
 Boiling point: 188~191°C
 Flashing point: 71°C
 Chemical Structure



CAS No : 100-47-0
 MITI No: (3)-1796
 Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
 Lot.No. : FAZ01
 Purity: 99 %
 Vehicle: DMSO

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	(134)	(133)	(8)	(10)	(20)	(30)	(25)	(33)	(6)	(12)
	138	127	14	8	23	31	26	31	8	10
	145	136	13	9	22	34	26	25	10	10
20	(142)	(132)	(14)	(9)	(23)	(33)	(26)	(28)	(9)	(10)
	123	142	7	11	26	28	31	38	8	9
	144	127	10	7	36	23	23	33	8	9
39	(134)	(135)	(9)	(9)	(31)	(26)	(27)	(36)	(8)	(9)
	134	172	11	11	28	24	18	21	2	13
	133	159	9	11	21	29	33	29	3	11
78	(134)	(166)	(10)	(11)	(25)	(27)	(26)	(25)	(3)	(12)
	165	159	8	15	25	28	29	51	8	10
	139	130	11	9	24	28	16	44	5	9
156	(152)	(145)	(10)	(12)	(25)	(28)	(23)	(48)	(7)	(10)
	158	149	14	14	18	24	26	45	2	9
	145	129	11	5	17	21	31	23	1	6
313	(152)	(139)	(13)	(10)	(18)	(23)	(29)	(34)	(2)	(8)
	142	122	5	13	21	25	31	30	6	13
	143	130	10	9	15	28	22	29	6	10
625	(143)	(126)	(8)	(11)	(18)	(27)	(27)	(30)	(6)	(12)
	129	126*	14*	13	31*	26*	31*	25	6*	10
	133	120*	13*	10	29*	28*	17*	20	7*	16
1250	(131)	(123*)	(14*)	(12)	(30*)	(27*)	(24*)	(23)	(7*)	(13)
	0*	0*	0*	0*	0*	16*	0*	9*	0*	0*
	0*	0*	0*	0*	0*	24*	0*	0*	0*	0*
2500	(0*)	(0*)	(0*)	(0*)	(0*)	(20*)	(0*)	(5*)	(0*)	(0*)
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)

Mutagenicity
 in Bacterial Test: Negative
 IARC Evaluation: not yet cited

Judgement										
Specific Mutagenicity										
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
Control	(721)	(1114)	(334)	(217)	(188)	(1398)	(474)	(399)	(640)	(162)

Experimental Data

Con. μ g/ 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	(142)	(146)	(14)	(10)	(18)	(25)	(29)	(38)	(7)	(6)
	138	139	15	11	11	23	32	24	3	13
	131	150	8	17	20	18	29	33	7	5
39	(135)	(145)	(12)	(14)	(16)	(21)	(31)	(29)	(5)	(9)
	141	142	9	10	21	21	32	32	8	7
	120	167	6	11	13	25	32	24	6	5
78	(131)	(155)	(8)	(11)	(17)	(23)	(32)	(28)	(7)	(6)
	138	152	10	11	11	28	38	30	3	11
	134	133	7	11	16	28	20	32	7	7
156	(136)	(143)	(9)	(11)	(14)	(28)	(29)	(31)	(5)	(9)
	138	121	9	13	18	20	25	31	8	5
	135	153	13	9	18	24	32	37	6	9
313	(137)	(137)	(11)	(11)	(18)	(22)	(29)	(34)	(7)	(7)
	122	149	17	15	17	24	28	28	2	2
	163	144	8	11	18	26	20	23	6	9
625	(143)	(147)	(13)	(13)	(18)	(25)	(24)	(26)	(4)	(6)
	101	108	14*	17	18	24	16	32	9	9
	76	122	7*	9	18	24	38	32	2	10
1250	(89)	(115)	(11*)	(13)	(18)	(24)	(27)	(32)	(6)	(10)
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
2500	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive	AF2	2AA	NaN ₃	2AA	AF2	2AA 20	AF2	2AA	9AA	2AA
Control	(764)	(843)	(272)	(185)	(245)	(1075)	(427)	(419)	(569)	(171)