

2-Chloronitrobenzene

[2-クロロニトロベンゼン]

Experimental Data - 1

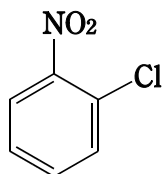
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(same experiment with next page)

Chemical Name; 2-Chloronitrobenzene
 Synonym ; o-Chloronitrobenzene
1-Chloro-2-nitrobenzene
o-クロロニトロベンゼン
1-クロロ-2-ニトロベンゼン

Molecular Weight ; 157.56
 Melting Point ; 33 °C [CHCD]
 33 - 36 °C [Aldrich]
 Boiling Point ; 245 °C [CHCD]
 246 °C [Aldrich]
 Flashing Point ; 126 °C [CHCD]
 > 110 °C [Aldrich]
 Molecular Formula; C₆H₄ClNO₂

Chemical Structure



CAS No. ; 88-73-3
 MITI No. ; (3)-442
 ML No. ; -
 Specified Chemical Substances; -

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
 Lot No. ; AR01
 Purity ; 99 %
 Vehicle ; DMSO

Mutagenicity in Bacterial Test ; **Positive**

IARC Evaluation ; not yet cited

Conc. µg/plate	Number of Revertants/plate								
	Base-substitution								
	TA100			TA1535			WP2uvrA		
	S9-	RatS9+	HamsterS9+	S9-	RatS9+	HamsterS9+	S9-	RatS9+	HamsterS9+
DMSO	(119)	(133)	(146)	(17)	(19)	(26)	(21)	(28)	(20)
	138	137	143	18	20	18	17	31	22
	112	155	171	18	25	24	25	26	32
39.1	(125)	(146)	(157)	(18)	(23)	(21)	(21)	(29)	(27)
	131	152	170	20	29	23	18	25	20
	121	139	190	13	29	25	22	24	31
78.1	(126)	(146)	(180)	(17)	(29)	(24)	(20)	(25)	(26)
	138	259	267	11	23	28	24	26	31
	135	211	267	16	21	31	16	28	23
156	(137)	(235)	(267)	(14)	(22)	(30)	(20)	(27)	(27)
	104	314	414	9	25	26	23	41	48
	128	330	405	11	22	28	26	43	39
313	(116)	(322)	(410)	(10)	(24)	(27)	(25)	(42)	(44)
	0*	0*	0*	0*	0*	0*	0*	0*	22*
	0*	0*	0*	0*	0*	0*	0*	0*	0*
625	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(11*)
	0*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*
1250	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(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*	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*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*
10000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	+	+	-	-	-	-	-	+
Specific Mutagenicity		604	843						76.7
Positive Control	AF-2 (869)	2-AA (1171)	2-AA (3320)	NaN ₃ (458)	2-AA (335)	2-AA (515)	AF-2 (337)	2-AA (1068)	2-AA (1399)

Experimental Data - 1

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(same experiment with previous page)

Conc. µg/plate	Number of Revertants/plate					
	Frame-shift					
	TA98			TA1537		
	S9-	RatS9+	HamsterS9+	S9-	RatS9+	HamsterS9+
	(20)	(22)	(24)	(5)	(12)	(11)
DMSO	11	23	37	5	16	7
	16	20	25	5	6	10
39.1	(14)	(22)	(31)	(5)	(11)	(9)
	14	15	36	8	13	8
	18	21	32	8	13	8
78.1	(16)	(18)	(34)	(8)	(13)	(8)
	11	36	30	3	9	14
	14	36	43	1	18	11
156	(13)	(36)	(37)	(2)	(14)	(13)
	9	45	64	8	10	13
	10	24	54	8	17	10
313	(10)	(35)	(59)	(8)	(14)	(12)
	0*	0*	24*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
625	(0*)	(0*)	(12*)	(0*)	(0*)	(0*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
1250	(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*	0*	0*
	0*	0*	0*	0*	0*	0*
5000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
10000	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	-	+	-	-	-
Specific Mutagenicity			112			
Positive Control	AF-2 (354)	2-AA (263)	2-AA (808)	9-AA (784)	2-AA (244)	2-AA (842)

(same experiment with next page)

Conc. µg/plate	Number of Revertants/plate								
	Base-substitution								
	TA100			TA1535			WP2uvrA		
	S9-	RatS9+	HamsterS9+	S9-	RatS9+	HamsterS9+	S9-	RatS9+	HamsterS9+
	(107)	(123)	(119)	(9)	(11)	(14)	(28)	(38)	(33)
DMSO	121	109	166	8	14	14	25	32	23
	82	149	152	6	7	10	21	28	32
39.1	(102)	(129)	(159)	(7)	(11)	(12)	(23)	(30)	(28)
	85	159	166	6	17	17	26	34	32
	106	160	153	10	17	16	25	46	40
78.1	(96)	(160)	(160)	(8)	(17)	(17)	(26)	(40)	(36)
	115	234	241	13	8	15	26	31	46
	102	242	240	8	11	8	23	32	37
156	(109)	(238)	(241)	(11)	(10)	(12)	(25)	(32)	(42)
	120	297	349	6	10	17	15	22	45
	126	313	361	7	10	29	31	25	52
250	(123)	(305)	(355)	(7)	(10)	(23)	(23)	(24)	(49)
	114	324	466	10	20	20	33	34	48
	105	348	389	11	14	26	20	44	40
313	(110)	(336)	(428)	(11)	(17)	(23)	(27)	(39)	(44)
	0*	188*	0*	0*	9*	0*	7*	39	47*
	0*	193*	0*	0*	9*	0*	18*	51	47*
500	(0*)	(191*)	(0*)	(0*)	(9*)	(0*)	(13*)	(45)	(47*)
	0*	0*	0*	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*	0*	0*	0*
625	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	+	+	-	-	-	-	-	-
Specific Mutagenicity		728	987						
Positive Control	AF-2 (848)	2-AA (1181)	2-AA (3554)	NaN ₃ (401)	2-AA (315)	2-AA (600)	AF-2 (334)	2-AA (1128)	2-AA (1480)

Experimental Data - 2

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(same experiment with previous page)

Conc. µg/plate	Number of Revertants/plate					
	Frame-shift					
	TA98			TA1537		
	S9-	RatS9+	HamsterS9+	S9-	RatS9+	HamsterS9+
	(18)	(28)	(27)	(14)	(17)	(18)
DMSO	24	14	29	7	13	18
	17	24	30	7	16	18
39.1	(21)	(19)	(30)	(7)	(15)	(18)
	15	16	37	5	17	10
	15	24	33	9	23	28
78.1	(15)	(20)	(35)	(7)	(20)	(19)
	11	25	48	18	16	16
	9	34	41	8	23	25
156	(10)	(30)	(45)	(13)	(20)	(21)
	17	31	63	10	13	9
	13	37	68	18	16	16
250	(15)	(34)	(66)	(14)	(15)	(13)
	8	41	64	7	18	17
	14	30	69	11	21	20
313	(11)	(36)	(67)	(9)	(20)	(19)
	0*	16*	59*	0*	8*	6*
	0*	30*	41*	0*	9*	9*
500	(0*)	(23*)	(50*)	(0*)	(9*)	(8*)
	0*	0*	0*	0*	0*	0*
	0*	0*	0*	0*	0*	0*
625	(0*)	(0*)	(0*)	(0*)	(0*)	(0*)
Judgement	-	-	+	-	-	-
Specific Mutagenicity			156			
Positive Control	AF-2 (358)	2-AA (284)	2-AA (1067)	9-AA (714)	2-AA (213)	2-AA (859)