

[4-ニトロ-*o*-フェニレンジアミン・HCl]

Experimental Data without Metabolic Activation

Chemical Name; 4-Nitro-*o*-phenylenediamine mono-
hydrochlorideSynonym ; 1,2-Diamino-4-nitrobenzene mono-
hydrochlorideNO₂PD

4-Nitro-1,2-benzenediamine・HCl

1,2-ジアミノ-4-ニトロベンゼン モノヒドロクロライド

4-ニトロ-1,2-ベンゼンジアミン・HCl

Molecular Weight ; 189.60

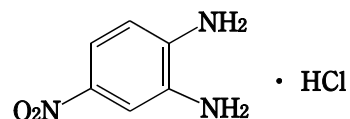
Melting Point ; - ℃

Boiling Point ; - ℃

Flashing Point ; - ℃

Molecular Formula; C₆H₇N₃O₂・HCl

Chemical Structure



CAS No. ; 53209-19-1

MITI No. ; (3)-402

ML No. ; -

Specified Chemical Substances; -

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.

Lot No. ; AZ-081

Purity ; 100 %

Vehicle ; DMSO

Substance	Treatment		No. of Metaphase	Polyploid (%)	Judge-ment	Cell with Structural Chromosome Aberration (%)							
	Time (h)	Concentration (mg/ml)				Chromatid		Chromosome		Total		Judge-ment	
						Gap	CTB	CTE	CSB	CSE	-G		+G
DMSO	24	1.0 %	200	3.0	-	0.5	2.0	0.5	0.0	0.0	2.5	2.5	-
	48	1.0 %	200	1.5	-	0.5	0.0	0.0	0.0	0.0	0.0	0.5	-
Test Chemical	24	0.019	200	1.5	-	0.0	1.5	2.5	0.0	0.0	4.0	4.0	-
		0.038	200	0.0	-	0.5	3.0	5.5	0.0	0.5	9.0	9.0	±
		0.075	200	0.0	-	0.5	7.5	7.5	0.0	0.0	14.5	14.5	+
		0.15	200	0.0	-	0.0	5.0	8.5	0.0	0.0	11.5	11.5	+
		0.3	180	0.6	-	1.1	5.0	8.3	0.0	0.0	12.2	12.8	+
	48	0.019	200	0.0	-	1.0	0.0	0.0	0.0	0.0	0.0	1.0	-
		0.038	200	2.5	-	0.5	4.0	6.5	0.0	0.0	9.0	9.0	±
		0.075	200	2.0	-	1.0	6.5	25.5	0.0	0.0	30.0	30.5	+
		0.15	200	0.5	-	1.0	12.5	43.0	0.0	0.0	46.0	46.0	+
		0.3	200	1.0	-	1.0	12.5	42.0	0.0	0.0	48.0	48.0	+
Positive Control [MMC]	24	0.00004	200	2.0	-	0.0	7.0	18.5	0.0	0.0	24.5	24.5	+
	48	0.00004	200	2.0	-	1.5	13.5	33.5	0.0	0.0	41.5	41.5	+

※ There was no observation for metaphase with both treatment of 24Hr and 48Hr at 0.6 mg/ml.

Judgement for

Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation

; not yet cited

Experimental Data with Metabolic Activation

Treatment			No. of Metaphase	Polyploid (%)	Judge- ment	Cell with Structural Chromosome Aberration (%)							Judge- ment
Substance	S9 mix	Concent- ration (mg/ml)				Chromatid		Chromosome		Total			
						Gap	CTB	CTE	CSB	CSE	-G	+G	
DMSO	-	1.0 %	200	2.0	-	0.0	0.5	0.5	0.0	0.0	1.0	1.0	-
	+	1.0 %	200	1.0	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-
Test Chemical	-	0.19	200	1.5	-	0.0	1.0	22.5	0.0	0.0	5.0	5.0	±
		0.38	200	4.0	-	0.5	3.0	10.5	0.0	0.0	13.0	13.0	+
		0.75	200	4.5	-	1.0	5.0	17.5	0.0	0.0	20.5	21.0	+
		1.5 *	102	2.0	-	0.0	5.9	8.8	0.0	0.0	13.7	13.7	+
		3.0 *					No observation for metaphase						
	+	0.19	200	0.5	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-
		0.38	200	1.5	-	0.5	0.0	1.0	0.0	0.0	1.0	1.5	-
		0.75	200	2.0	-	0.0	2.5	4.0	0.0	0.0	6.0	6.0	±
		1.5 *	200	0.5	-	1.0	3.0	4.5	0.0	0.0	7.5	8.0	±
		3.0 *	200	2.0	-	0.5	3.0	4.0	0.0	0.0	7.0	7.5	±
Positive Control (B(a)P)	-	0.01	200	2.5	-	0.5	1.0	0.0	0.0	0.0	1.0	1.5	-
	+	0.01	200	3.5	-	0.0	4.0	19.0	0.0	0.0	21.5	21.5	+

* Test chemical was precipitated.