p-Chloronitrobenzene (p-クロロニトロベンゼン)

Chemical Name: p-Chloronitrobenzene
Synonym: p-Nitrochlorobenzene
Benzene, 1-chloro-4-nitro-
Molecular weight: 157.6
Melting point: 83℃−84℃
Boling point: 242℃
Flasing point:> 110℃

Chemical Structure

CAS No : 100-00-5
MITI No : (3)-442
Specified chemical substances : G2
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AY01
Purity: %
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

Experimental Data

	Treated Time (Hr)	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%) Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	24		200	0	−	1.0	1.5	0.5	0	0	2.0	2.5	−
	48		200	1.0	−	0.5	0	0	0	0	0	0.5	−
Test Chemical													
	24	0.05	200	8.5	±	0	0	1.0	0	0	1.0	1.0	−
		0.1	200	15.5	+	0.5	1.5	1.5	0	0	3.0	3.0	−
		0.2	200	7.5	±	0.5	1.0	0.5	0	0	1.0	1.5	−
		0.4	200	0.5	−	1.0	1.0	0.5	0	0	1.5	2.5	−
		0.6				No observation for metaphase							
	48	0.05	200	3.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.1	200	10.0	+	0.5	0	0.5	0	0	0.5	1.0	−
		0.2	200	12.0	+	0	0	0	0	1.0	1.0	1.0	−
		0.4	200	17.5	+	0.5	0	0.5	0	0	0.5	1.0	−
		0.6	200	8.5	±	0.5	1.5	2.5	0	0	3.5	4.0	−
Positive Control (MMC)	24	0.00008	200	0.5	−	11.5	15.0	47.0	0	0	52.5	54.5	+
	48	0.00008	200	1.0	−	8.5	28.5	83.5	0	0	86.5	87.0	+

Test chemical was precipitated at the concentration of 0.4, 0.6mg/ml.
Metaphase was not observed at the concentration of 0.8mg/ml.

Experimental Data

	S 9 with or without	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%) Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	−		200	3.5	−	1.0	0.5	0.5	0	0	1.0	2.0	−
	+		200	1.5	−	0	0.5	0	0	0	0.5	0.5	−
Test Chemical													
	−	0.2	200	10.5	+	0.5	0.5	1.0	0	0	1.5	2.0	−
		0.3	200	7.0	±	0.5	1.0	0.5	0	0	1.5	2.0	−
		0.4	200	6.0	±	0	0	0	0	0	0	0	−
		0.5	200	8.0	±	0	0.5	1.0	0	0	1.5	1.5	−
		0.6	200	4.5	−	0.5	0.5	0.5	0	0	1.0	1.5	−
	+	0.2	200	7.5	±	0.5	0.5	0.5	0	0	1.0	1.5	−
		0.3	200	4.5	−	1.5	0	1.0	0	0	1.0	2.5	−
		0.4	200	4.0	−	0	0	2.0	0	0	2.0	2.0	−
		0.5	200	1.5	−	1.0	2.0	7.0	0	0	9.0	9.5	±
		0.6	200	3.0	−	3.5	7.0	13.5	0	0	17.0	18.5	+
Positive Control													
(B(a)P)	−	0.008	200	4.0	−	1.0	0	1.0	0	0	1.0	2.0	−
	+	0.008	200	0	−	6.0	7.5	53.0	0	0	55.5	57.0	+

Test chemical was precipitated at the concentration of 0.4, 0.5, 0.6mg/ml.
Metaphase was not observed at the concentration of 0.7mg/ml.