1,3-Dichloropropene (1,3-ジクロロプロペン)

Chemical Name: 1,3-Dichloropropene
Synonym 1,3-Dichloro-1-propene
3-Chloroallyl chloride
Molecular weight: 111.0
Melting point:
Boiling point: 108℃, 105-106℃(730mmHg)
Flashig point: 27℃

Chemical Structure

$$C\ell CH_2CH=CHC\ell$$

CAS No: 542-75-6
MITI No: (2)-125
Source of Substance: Wako Pure Chem. Ind. Ltd.
Lot.No: CDF6263
Purity: %
Vehicle: 1% CMC

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation: G 2B

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
CMC	24		200	0	−	1.0	0	0.5	0	0	0.5	1.5	−
	48		200	0	−	1.0	0	0	0	0	0	1.0	−
Test Chemical													
	24	0.05	200	0.5	−	0	0.5	0.5	0	0	1.0	1.0	−
		0.1	200	10.5	+	1.5	1.5	4.5	0	0.5	6.0	7.5	±
		0.2	200	25.5	+	4.5	6.5	14.5	0	0	17.5	18.0	+
		0.3				No observation for metaphase							
		0.4				No observation for metaphase							
	48	0.05	200	4.0	−	0.5	0.5	0	0	0	0.5	1.0	−
		0.1	200	6.0	±	0.5	0.5	0	0	0.5	1.5	1.5	−
		0.2	200	21.0	+	1.5	0.5	4.0	0	1.0	5.0	5.5	±
		0.3				No observation for metaphase							
		0.4				No observation for metaphase							
Positive Control													
(MMC)	24	0.00008	200	0	−	8.5	11.5	50.5	0	0	51.5	53.0	+
	48	0.00008	200	2.0	−	6.0	20.5	6.5	0	0.5	69.0	69.5	+

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
CMC	−		200	0	−	0.5	0	0	0	0	0	0.5	−
	+		200	0	−	0	0	0	0	0	0	0	−
Test Chemical													
	−	0.025	200	1.0	−	0.5	0	0	0	0	0	0.5	−
		0.050	200	0.5	−	0.5	0	0.5	0	0	0.5	1.0	−
		0.075	200	0.5	−	0.5	0	1.0	0	0	1.0	1.5	−
		0.1	200	1.0	−	1.0	0	0	0	0	0	1.0	−
		0.125	200	1.5	−	0.5	0	1.0	0	0	1.0	1.5	−
	+	0.025	200	0	−	1.0	0.5	1.0	0	0	1.0	2.0	−
		0.050	200	2.0	−	1.0	0	1.0	0	0	1.0	2.0	−
		0.075	200	17.0	+	3.0	1.5	5.0	0	0	6.5	9.0	±
		0.1	200	32.5	+	5.5	7.5	16.5	0	0.5	19.5	21.0	+
		0.125	200			No observation for metaphase							
Positive Control (B(a)P)													
	−	0.016	200	0	−	0	0	0	0	0	0	0.5	−
	+	0.016	200	0.5	−	6.5	10.0	39.0	0	0	44.0	44.5	+