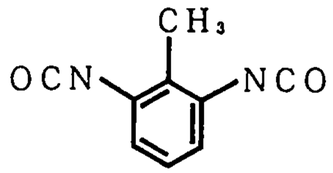
Toluene 2,6-diisocyanate (トルエン 2,6-ジイソシアナート)

Chemical Name: Toluene 2,6-diisocyanate
Synonym: 2-Methyl-m-phenylenediisocyanate
Benzene, 1,3-diisocyanato-2-methyl-
Molecular weight: 174.16
Melting point: ℃
Boiling point: 129-133℃

Chemical Structure



CAS No : 91-08-7
MITI No : (3)-2214
Specified chemical substances : G2
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AV01
Purity: %
Vehicle: DMSO

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
DMSO	24		200	0	−	0	0.5	0	0	0	0.5	0.5	−
	48		200	1.0	−	0	0.5	0	0	0	0.5	0.5	−
Test Chemical													
	24	0.05	200	0.5	−	1.0	0.5	0.5	0	0	1.0	2.0	−
		0.1	200	1.0	−	0.5	0.5	1.5	0	0	2.0	2.0	−
		0.2	200	2.0	−	0	0.5	1.5	0	0	1.5	1.5	−
		0.3	200	14.0	+	3.5	7.5	10.0	0	0	14.5	15.5	+
		0.4				No observation for metaphase							
	48	0.05	200	0	−	0	0	2.0	0	0	2.0	2.0	−
		0.1	200	0	−	0	0	0.5	0	0	0.5	0.5	−
		0.2	200	3.0	−	1.0	0	0	0	0	0	1.0	−
		0.3	200	2.0	−	0.5	0.5	1.0	0	0.5	2.0	2.5	−
		0.4	200	5.4	±	0.5	0	1.0	0	0.6	1.8	2.4	−
Positive Contr													
(MMC)	24	0.00005	200	0.5	−	3.5	12.5	63.5	0	0	69.0	69.0	+
	48	0.00005	200	1.5	−	3.5	10.0	81.0	0	1.5	83.5	84.0	+

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	0.5	−	0	0	0.5	0	0	0.5	0.5	−
	+		200	1.5	−	1.5	0	1.0	0	0	1.0	2.0	−
Test Chemical													
	−	0.05	200	0.5	−	0.5	0	0.5	0	0	0.5	0.5	−
		0.1	200	2.0	−	1.0	0	0.5	0	0	0.5	1.5	−
		0.2	200	9.0	±	1.0	0	0.5	0	0	0.5	2.0	−
		0.4	128	21.1	+	5.5	6.3	11.7	0	0	14.1	15.6	+
		0.6				No observation for metaphase							
	+	0.05	200	2.0	−	1.0	0.5	0	0	0	0.5	1.5	−
		0.1	200	2.0	−	0.5	0	1.5	0	0	1.5	1.5	−
		0.2	200	4.5	−	2.5	0.5	0.5	0	0.5	1.5	4.0	−
		0.4	200	18.5	+	1.5	3.0	7.5	0	0	8.5	9.0	±
		0.6				No observation for metaphase							
Positive Control													
(B(a)P)	−		200	5.5	±	1.0	0.5	0.5	0	0	1.0	2.0	−
	+		200	0.5	−	4.5	5.5	42.0	0	0	43.0	43.5	+