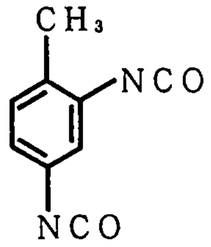
Toluene 2,4-diisocyanate (トルエン 2,4-ジイソシアナート)

Chemical Name: Toluene 2,4-diisocyanate
Synonym: 4-Methyl-m-phenylenediisocyanate
Benzene, 2,4-diisocyanato-1-methyl-
Molecular weight: 174.16
Melting point: 19.5-21.5℃
Boiling point: 250℃

Chemical Structure



CAS No : 584-84-9
MITI No : (3)-2214
Specified chemical substance : G2
Source of Substance: Tokyo Kasei Kogyo Co., Ltd.
Lot.No.: AX01
Purity: %
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Negative

IARC Evaluation : G 2B

Experimental Data

	Treated Time (Hr)	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)		Cell with Structural Chromosome Aberration (%)							
					Judge	Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	24		200	0	−	0	0	0.5	0	0	0.5	0.5	−
	48		200	0.5	−	0	0	0.5	0	0	0.5	0.5	−
Test Chemica	1												
	24	0.1	200	0.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.2	200	1.0	−	0.5	0	0	0	0	0	0.5	−
		0.4	200	2.5	−	0.5	1.0	1.0	0	0	1.5	2.0	−
		0.6				No observation for metaphase							
		0.8				No observation for metaphase							
	48	0.1	200	1.0	−	0	0	0	0	0	0	0	−
		0.2	200	1.5	−	0	0	0	0	0	0	0	−
		0.4	200	1.5	−	0	0	0	0	0	0	0	−
		0.6				No observation for metaphase							
		0.8				No observation for metaphase							
Positive Control													
(MMC)	24	0.00005	200	0.5	−	2.0	5.0	57.5	0	0	58.0	58.0	+
	48	0.00005	200	1.5	−	6.0	8.0	81.5	0	0.5	83.0	83.0	+

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	1.0	−	0	0.5	0	0	0	0.5	0.5	−
		0.1	200	5.5	±	0	0.5	0.5	0	0	1.0	1.0	−
		0.2	200	3.0	−	0.5	0	0	0	0.5	0.5	1.0	−
		0.4	200	3.5	−	0.5	0	0.5	0	0	0.5	1.0	−
		0.6				No observation for metaphase							
	+	0.05	200	2.5	−	1.0	0	0.5	0	0	0.5	1.5	−
		0.1	200	3.5	−	0.5	0.5	0.5	0	0.5	1.5	2.0	−
		0.2	200	1.5	−	1.0	0	0	0.5	0	0.5	1.5	−
		0.4	200	6.0	±	2.5	0.5	0.5	0	0	1.0	3.5	−
		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	+