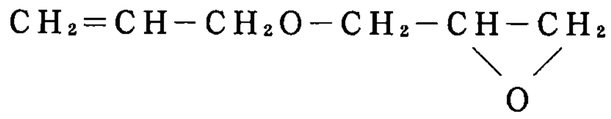
Allylglycidyl ether (アリルグリシジルエーテル)

Chemical Name: Allylglycidyl ether
Synonym 3-Allyloxy-1,2-epoxypropane
Molecular weight: 114.14
Melting point: ℃
Boiling point: 153.9-154℃(760mmHg)
Flashing point: 57℃

Chemical Structure



CAS No : 106-92-3
MITI No : (2)-393
Source of Substance: Wako Pure Chemical Ind., Ltd.
Lot.No.: AWJ1500
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	−	0	0	0	0	0	0	0	−
	48		200	2.0	−	0	0	0	0	0	0	0	−
Test Chemical													
	24	0.04	200	0.5	−	1.5	0	2.5	0	0	2.5	4.0	−
		0.06	200	1.5	−	0.5	0.5	1.5	0	0	2.0	2.5	−
		0.08	200	1.0	−	2.5	1.0	3.0	0	0	4.0	6.5	±
		0.10	168	0.6	−	9.5	8.3	16.7	0	0	22.6	26.2	+
		0.12	141	0.7	−	15.6	25.5	53.2	0	0	63.8	69.5	+
	48	0.04	200	0.0	−	1.5	0.5	1.0	0	0	1.5	3.0	−
		0.06	200	0.5	−	1.0	0.5	2.0	0	0	2.5	3.5	−
		0.08	139	0.7	−	7.2	5.8	11.5	0.7	0	16.5	20.1	+
		0.10				No observation for metaphase							
		0.12				No observation for metaphase							
Positive Control (MMC)													
(MMC)	24	0.00005	200	1.0	−	6.5	12.5	43.0	0	0	44.5	46.5	+
	48	0.00005	200	1.0	−	12.5	18.0	82.5	0	0.5	85.5	86.5	+

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
DMSO −		200	0	−	0	0	0	0	0	0	0	−
+		200	0	−	1.0	0	0	0	0	0	1.0	−
Test Chemical												
−	0.125	200	0.5	−	1.0	0	0.5	0	0	0.5	1.5	−
	0.15	200	0.5	−	1.5	0.5	0.5	0	0	1.0	2.5	−
	0.175	200	1.0	−	0	0	2.0	0	0	2.0	2.0	−
	0.2	200	1.5	−	1.5	2.0	4.0	0	0	5.0	6.0	±
	0.225	200	0	−	3.5	7.5	20.0	0	0	23.5	24.5	+
+	0.125	200	1.5	−	0	0	0	0	0.5	0.5	0.5	−
	0.15	200	2.0	−	0.5	0.5	7.5	0	0	7.5	8.0	±
	0.175	200	3.5	−	1.5	2.0	15.5	0	0	16.5	16.5	+
	0.2	200	0.5	−	1.5	3.0	17.0	0	0	18.5	19.0	+
	0.225	200	2.5	−	11.0	15.0	37.0	0	0	43.0	44.0	+
Positive Control												
(B(a)P)−	0.008	200	0.5	−	0	0.5	0.5	0	0	1.0	1.0	−
+	0.008	200	0	−	4.0	4.0	22.0	0	0	23.0	24.0	+

Metaphase was not observed at the concentration of 0.25 mg/ml.