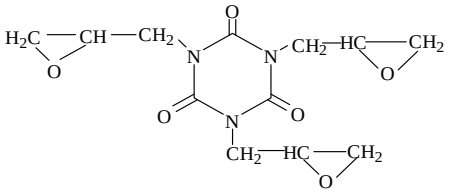
Chemical Name ; 1,3,5-Tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1*H*,3*H*,5*H*)-trione

Synonym ; Tris(2,3-epoxypropyl) isocyanurate
1,3,5-Trisgrycidyl-isocyanuric acid
Trigrycidyl isocyanurate
1,3,5-トリス(2,3-エポキシプロピル)ヘキサヒドロ-1,3,5-トリアジン-2,4,6-トリオン
1,3,5-トリスグリシジルイソシアヌル酸
トリグリシジルイソシアヌラート

Molecular Weight ; 297.27
Melting Point ; 116℃(decomposition)
Boiling Point ; −
Flashing Point ; −
Molecular Formula ; $C_{12}H_{15}N_3O_6$

Chemical Structure



CAS No. ; 2451-62-9
MITI No. ; (5)-1052
ML No. ; −
Specified Chemical Substances ; −

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; GB01
Purity ; 98.3%

Vehicle ; Distilled H_2O

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; not yet cited

Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%) No. of Metaphase	Chromatid ctb	Chromatid cte	Chromosome csb	Chromosome cse	Others	Total	Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%) No. of Metaphase	Poly-ploid	Others	Total
6-18	−	[H_2O] 10%	200	0	0	0	0	0	0	0.5	100	200	2	0	2
		0.00010	200	1	1.5	0	0	0	2.5	0.5	96	200	2	0	2
		0.00020	200	4	12.5	0	0	0	16.5	0	101	200	1	0	1
		0.00040	200	4	40	0	0	0	42	0.5	105	200	1.5	0	1.5
		0.00080	200	10	74.5	0	0	0	76.5	0.5	96	200	0.5	0	0.5
		0.0016	161	8.7	95	0	0	0	96.9	0.6	103	161	0	0	0
		[MMC] 0.00012	200	8	50.5	0	0	0	54.5	1.5	−	200	0.5	0	0.5
6-18	+	[H_2O] 10%	200	0	1	0	0	0	1	0.5	100	200	1.5	0	1.5
		0.013	200	0	0	0	0	0	0	0	102	200	0.5	0	0.5
		0.025	200	1	2.5	0	0	0	3	0	97	200	1	0	1
		0.050	200	5.5	76	0	0	0	77	0.5	108	200	0	0	0
		0.075	143	7.7	94.4	0	0	0	94.4	0.7	84	143	0	0	0
		0.10	55	14.6	96.4	0	0	0	100	0	83	55	0	0	0
		[B[a]P] 0.01	200	3	24	0	0	0	25.5	1	−	200	1.5	0	1.5

※ Test conditions: S9mix ; Treatment time ; 6h, Rcovery time ; 18h

Experimental Data without Metabolic Activation (Continuous Treatments)

Treatment Time (h)	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
		No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
			ctb	cte	csb	cse								
24-0	[H_2O] 10%	200	0	0	0	0	0	0	1.5	100	200	0.5	0	0.5
	0.000038	200	1	1	0	0	0	2	0.5	95	200	2.5	0	2.5
	0.000075	200	1.5	7.5	0.5	0	0	9.5	0.5	116	200	0.5	0	0.5
	0.00015	200	3	21	0	0	0	23.5	0	106	200	1	0	1
	0.00030	200	12	47.5	0	0	0	56	1	119	200	2	0	2
	0.00060	200	12	75.5	0	0	0	80.5	0.5	111	200	0	0	0
	[MMC] 0.00004	200	6	31	0	0	0	35.5	0.5	−	200	1.5	0	1.5
48-0	[H_2O] 10%	200	0	0.5	0	0	0	0.5	0	100	200	1	0	1
	0.000038	200	0	0.5	0	0	0	0.5	0	119	200	0	0	0
	0.000075	200	0	0.5	0	0	0	0.5	0	118	200	3	0	3
	0.00015	200	0	2	0	0	0	2	0	108	200	1	0	1
	0.00030	200	6.5	28.5	0.5	0	0	33.5	1	117	200	1.5	0	1.5
	0.00060	200	12.5	83	0	1	0	86.5	1	105	200	1.5	0	1.5
	[MMC] 0.00004	200	14.5	51	0.5	1	0	56	2	−	200	0	0	0

※ Test conditions: Treatment time ; 24h or 48h, Rcovery time ; 0h