

Chloroacetaldehyde (クロロアセトアルデヒド)

Experimental Data

Chemical Name:	Chloroacetaldehyde
Synonym	Acetoaldehyde, chloro-
Molecular weight:	79.0
Melting point:	43-50°C
Boiling point:	85°C
Flashing point:	53°C
Chemical Structure	
$C \ell CH_2CHO$	
CAS No :	107-20-0
MITI No :	(2)-526
Source of Substance:	Tokyo Kasei Kogyo Co., Ltd.
Lot.No.:	AI01
Purity:	%
Vehicle:	PBS

Treated Time (Hr)	Concentration (mg/ml)	No. of Meta-phase	Poly-ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)								
										Total		Judge	
					Gap	CTB	CTE	CSB	CSE	-G	+G		
PBS	24	200	0.5	-	1.0	0	0	0	0	0	0	-	
	48	200	0.5	-	0	0	0	0	0	0	0	-	
Test Chemical													
	24	0.0002	200	0.5	-	0	0	0.5	0	0	0.5	0.5	-
		0.0004	200	1.5	-	2.0	3.0	4.5	0.5	0	7.5	8.5	±
		0.0008	200	0	-	8.5	21.5	37.5	0	0	48.5	50.5	+
		0.001				No observation for metaphase							
	48	0.0002	200	0	-	0	0	0	0	0	0	0	-
		0.0004	200	1.5	-	0	0	0.5	0.5	0	1.0	1.0	-
		0.0008	200	26.5	+	3.5	5.0	16.5	0	0	21.0	23.0	+
		0.001				No observation for metaphase							
Positive Control													
(MMC)	24	0.0001	200	0	-	2.0	8.5	44.5	0	0	51.0	51.5	+
	48	0.0001	200	2.0	-	2.0	8.5	53.0	0	0	59.5	60.0	+

Judgement for Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

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S 9	with or without	Concentration (mg/ml)	No. of Meta-phase	Poly-ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)						Judge	
						Gap	CTB	CTE	CSB	CSE	Total		
											-G		+G
PBS	-		200	0	-	0.5	0.5	0	0	0	0.5	1.0	-
	+		200	0.5	-	0.5	0	0	0	0	0	0.5	-
Test Chemical													
	-	0.0005	200	1.0	-	2.0	0.5	0	0	0	0.5	2.0	-
		0.001	200	0.5	-	5.0	12.0	28.5	0	0	32.5	35.0	+
		0.002	55	3.0	-	16.1	40.7	35.1	0	0	73.5	79.1	+
		0.004				No observation for metaphase							
		0.008				No observation for metaphase							
	+	0.002	200	0.5	-	0	0	1.0	0	0	1.0	1.0	-
		0.004	200	0	-	0.5	0	0	0	0	0	0.5	-
		0.008	200	0	-	2.5	0.5	1.0	0	0	1.5	1.5	-
		0.016				No observation for metaphase							
Positive Control													
(B(a)P)	-	0.016	200	0	-	1.0	0	0	0	0	0	0	-
	+	0.016	200	0	-	3.0	6.0	41.0	0	0	44.0	45.0	+