

1-Bromo-2-chloroethane (1-ブロモ-2-クロロエタン)

Chemical Name:	1-Bromo-2-chloroethane
Synonym	Ethylene chlorobromide
Molecular weight:	143.41
Melting point:	-16.6°C
Boiling point:	106-107°C
Chemical Structure	
	$\text{CH}_2\text{BrCH}_2\text{Cl}$
CAS No :	107-04-0
MITI No :	(2)-3351
Source of Substance:	Tokyo Kasei Kogyo Co., Ltd.
Lot. No. :	FCZ01
Purity:	%
Vehicle:	1% CMC

Judgement for Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

Experimental Data

Treated Time (Hr)	Concentration (mg/ml)	No. of Meta-phase	Poly-ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)								
					Gap	CTB	CTE	CSB	CSE	Total		Judge	
										-G	+G		
CMC	24	200	0	—	0	0	0	0	0	0	0	0	—
	48	200	0	—	0	0	0	0	0	0	0	0	—
Test Chemical													
	24	200	0	—	0	0.5	0	0	0	0	0.5	0.5	—
			1.0	—	0.5	0	1.5	0	0	1.5	2.0	—	
			2.0	—	0.5	2.0	26.0	0	0	27.0	27.5	+	
			3.0	—	1.5	4.0	27.0	0.5	0	30.5	31.5	+	
			4.0	—	No observation for metaphase								
	48	200	1.0	—	0.5	0	0.5	0	0	0.5	1.0	—	
	24	200	1.0	—	0.5	0.5	0	0	0	0.5	1.0	—	
			2.0	—	1.5	0.5	1.0	0	0	1.5	2.5	—	
			3.0	—	1.5	0.5	2.0	0	0	2.5	3.5	—	
			4.0	—	4.5	18.0	49.0	0	1.0	57.0	57.5	—	
			Positive Control (MMC)										
	24	0.00008	200	0	—	2.0	6.5	30.0	0	0	33.0	33.5	+
			200	0.5	—	2.0	8.0	49.5	0	0.5	53.5	53.5	+

Experimental Data

S 9 with or without	Concent- ration (mg/ml)	No. of Meta- phase	Poly- ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)								
					Gap	CTB	CTE	CSB	CSE	Total		Judge	
										-G	+G		
CMC	-	200	0	-	0	0	0.5	0	0	0.5	0.5	-	
	+	200	0	-	0.5	0	0	0	0	0	0.5	-	
Test Chemical													
-	0.1	200	0	-	0	0.5	1.0	0	0	1.5	1.5	-	
	0.2	200	0.5	-	0	0	0.5	0	0	0.5	0.5	-	
	0.3	200	0	-	0	0	0	0	0	0	0	-	
	0.4	200	0.5	-	0	0	0.5	0	0	0.5	0.5	-	
	0.5	200	0	-	1.0	0	0.5	0	0	0.5	1.5	-	
	+	0.1	200	0	-	0.5	0	1.5	0	0	1.5	2.0	-
		0.2	200	0	-	3.5	0	5.5	0	0	5.5	8.5	±
		0.3	200	1.5	-	7.0	8.5	33.0	0	0	5.5	38.0	+
		0.4				No observation for metaphase							
		0.5				No observation for metaphase							
Positive Control													
(B(a)P)	-	200	1.0	-	0.5	0	0.5	0	0	0.5	1.0	-	
	+	200	0.5	-	4.0	2.0	17.0	0	0	9.0	22.5	+	