

[ブromoklorometan]

Experimental Data without Metabolic Activation

Chemical Name; Bromochloromethane
 Synonym ; Methylene bromochloride
 Methylene chlorobromide
 Halon 1011
 メチレンブromokloriト
 メチレンklorobromiト
 ハロン 1011

Molecular Weight ; 129.38
 Melting Point ; - 88 °C [Aldrich]
 Boiling Point ; 67.8 °C [CHCD]
 68 °C [Aldrich]
 Flashing Point ; - °C
 Molecular Formula; CH₂BrCl

Chemical Structure



CAS No. ; 74-97-5
 MITI No. ; (2)-58
 ML No. ; -

Specified Chemical Substances; -

Source of Substance; Wako Junyaku Kogyo Co., Ltd.
 Lot No. ; TWN2223
 Purity ; 98.0 %

Vehicle ; CMC (suspension)
 Note : Suspension with laboratoric
 mixer and sonication

Substance	Treatment		No. of Metaphase	Polyploid (%)	Judge- ment	Cell with Structural Chromosome Aberration (%)							Judge- ment
	Time (h)	Concent- ration (mg/ml)				Chromatid		Chromosome		Total		Judge- ment	
						Gap	CTB	CTE	CSB	CSE	-G		
CMC	24		200	0.5	-	0.5	0.0	0.0	0.0	0.0	0.0	0.5	-
	48		200	0.5	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Test Chemical	24	3.0	200	1.0	-	0.5	0.0	2.5	0.0	0.0	2.5	3.0	-
		4.0	200	0.5	-	0.5	1.0	7.5	0.0	0.0	8.5	9.0	±
		5.0	200	1.5	-	2.5	2.5	12.5	0.0	0.0	14.5	15.5	+
		6.0	200	0.0	-	6.0	7.5	22.0	0.0	0.0	29.5	31.5	+
		7.0					No observation for metaphase						
	48	3.0	200	3.5	-	0.0	1.0	3.5	0.0	0.0	4.5	4.5	-
		4.0	200	7.0	±	0.0	2.5	13.0	0.0	0.5	14.5	14.5	+
	5.0	200	9.5	±	0.5	7.5	28.0	0.0	1.0	33.5	34.0	+	
	6.0	150	6.7	±	3.3	14.0	48.7	0.0	0.0	50.0	50.0	+	
	7.0				No observation for metaphase								
Positive	24	0.00004	200	0.5	-	4.5	7.5	48.0	0.0	0.0	50.0	50.5	+
Control [MMC]	48	0.00004	200	3.0	-	3.5	8.5	69.5	0.0	0.0	70.5	70.5	+

※ The culture bottle was sealed and cultured standing after adding the test substances.

Judgement for

Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation ; not yet cited

Experimental Data with Metabolic Activation

Substance	Treatment		No. of Metaphase	Polyploid (%)	Judge- ment	Cell with Structural Chromosome Aberration (%)							Judge- ment	
	S9 mix	Concent- ration (mg/ml)				Gap	Chromatid		Chromosome		Total			
							CTB	CTE	CSB	CSE	-G	+G		
CMC	-		200	1.0	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-	
	+		200	1.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
Test Chemical	-	2.0	200	1.0	-	0.5	1.0	1.0	0.0	0.0	2.0	2.0	-	
		4.0	200	1.0	-	0.0	0.5	2.0	0.0	0.0	2.5	2.5	-	
		6.0	200	3.5	-	0.5	0.0	1.5	0.0	0.0	1.5	2.0	-	
		8.0	200	2.5	-	0.5	3.0	9.0	0.0	0.0	11.5	12.0	+	
		10.0	200	1.5	-	2.0	4.0	22.5	0.0	0.5	24.5	25.0	+	
	+	2.0	200	1.0	-	0.0	0.5	1.5	0.0	0.0	2.0	2.0	-	
		4.0	200	1.5	-	0.0	0.0	1.5	0.0	0.0	1.5	1.5	-	
		6.0	200	3.0	-	0.0	0.5	2.5	0.0	0.0	3.0	3.0	-	
		8.0	200	1.5	-	1.0	4.0	19.0	0.0	0.5	22.5	22.5	+	
		10.0	200	3.0	-	1.0	2.5	14.5	0.0	0.0	16.5	16.5	+	
Positive	[MMC]	-	0.00004	200	1.5	-	0.5	10.0	23.5	0.0	0.0	31.0	31.5	+
Control	[B(a)P]	+	0.01	200	3.0	-	1.0	5.5	23.0	0.0	0.0	26.0	26.5	+

※ The culture bottle was sealed and cultured standing after adding the test substances.