

[ブロモクロロメタン]

Chemical Name; Bromochloromethane  
 Synonym ; Methylene bromochloride  
Methylene chlorobromide  
Halon 1011  
メチレンブロモクロリド  
メチレンクロロブロミド  
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; CH<sub>2</sub>BrCl

**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 laboratory  
 mixer and sonication

Experimental Data without Metabolic Activation

Substance	Time (h)	Concen- tration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge- ment	Cell with Structural Chromosome Aberration (%)						Judge- ment
						Gap	Chromatid CTB	Chromatid CTE	Chromosome CSB	Chromosome CSE	Total -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	24	3.0	200	1.0	—	0.5	0.0	2.5	0.0	0.0	2.5	3.0
Chemical		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	48	0.00004	200	3.0	—	3.5	8.5	69.5	0.0	0.0	70.5	70.5
		[MMC]										

※ 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 (%)								
	S9 mix	Concen- tration (mg/ml)				Gap	Chromatid CTB	Chromatid CTE	Chromosome CSB	Chromosome CSE	Total -G	Total +G	Judge- ment	
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 Control	[MMC]	—	0.00004	200	1.5	—	0.5	10.0	23.5	0.0	0.0	31.0	31.5	+
	[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.