

2-Bromo-2-methylpropionic acid (2-ブロモ-2-メチルプロピオン酸)

Experimental Data

<b>Chemical Name:</b>	2-Bromo-2-methylpropionic acid
<b>Synonym</b>	$\alpha$ -Bromoisobutyric acid
<b>Molecular weight:</b>	167.01
<b>Melting point:</b>	44-47°C
<b>Boiling point:</b>	198-200°C
<b>Flashing point:</b>	>110°C
<b>Chemical Structure</b>	
$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} - \text{COOH} \\   \\ \text{Br} \end{array}$	
<b>CAS No :</b>	2052-01-9
<b>Source of Substance:</b>	Fluka Chemical AG
<b>Lot.No. :</b>	252812 889
<b>Purity:</b>	%
<b>Vehicle:</b>	Saline

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	
Saline 24		200	0	—	0	0.5	0.5	0	0	1.0	1.0	—
48		200	0	—	0	0	0	0	0	0	0	—
<b>Test Chemical</b>												
24	0.4	200	0	—	0	0	0.5	0	0	0.5	0.5	—
	0.8	200	0	—	0.5	0.5	7.0	0	0.5	7.5	7.5	±
	1.2	200	0.5	—	2.0	8.5	35.0	0	0	40.5	40.5	+
	1.6	200	1.0	—	18.5	49.0	83.5	0	0	87.0	87.0	+
	2.0				No observation for metaphase							
48	0.4	200	0.5	—	0.5	0	0.5	0	0	0.5	1.0	—
	0.8	200	1.0	—	0	0	0.5	0	0	0.5	0.5	—
	1.2	200	0.5	—	0.5	0	3.0	0	0	3.0	3.5	—
	1.6	200	0.5	—	3.5	7.0	39.0	0	0.5	43.5	44.5	+
	2.0				No observation for metaphase							
<b>Positive Control (MMC)</b>												
24	0.00005	200	0.5	—	1.5	5.0	34.0	0	0	35.0	36.0	+
48	0.00005	200	1.0	—	2.5	10.0	61.0	0	0.5	63.5	63.5	+

Judgement for Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

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S 9 with or without	Concent- ration (mg/ml)	No. of Meta- phase	Poly- ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)							Judge
					Gap	CTB	CTE	Total		-G	+G	
								CSB	CSE			
Saline	-	200	1.0	-	0	0	0.5	0	0	0.5	0.5	-
	+	200	0	-	0	0	0	0	0	0	0	-
<b>Test Chemical</b>												
-	0.25	200	1.0	-	0.5	0	0.5	0	0	0.5	1.0	-
	0.50	200	2.5	-	0	0	1.5	0	0	1.5	1.5	-
	1.0	200	0	-	1.0	2.0	4.0	0	0	5.5	5.5	±
	2.0	200	0.5	-	9.0	12.0	70.5	0	0	71.5	72.5	+
	3.0				No observation for metaphase							
+	0.25	200	0	-	0	0.5	0	0	0	0.5	0.5	-
	0.50	200	1.0	-	0	0	1.5	0	0	1.5	1.5	-
	1.0	200	1.0	-	1.5	3.0	23.0	0	0	25.0	25.5	+
	2.0				No observation for metaphase							
	3.0				No observation for metaphase							
<b>Positive Control</b>												
(B(a)P)	-	200	1.5	-	1.0	0.5	0	0	0	0.5	1.5	-
	+	200	0.5	-	3.5	2.0	43.0	0	0	43.0	43.5	+