

2,2-Dichloropropionic acid (2,2-ジクロロプロピオン酸)

Experimental Data

<u>Chemical Name:</u>	2,2-Dichloropropionic acid
<u>Synonym</u>	Propionic acid, 2,2-dichloro-
<u>Molecular weight:</u>	143.0
<u>Melting point:</u>	°C
<u>Boiling point:</u>	185~190°C 90-92°C(14mmHg)
<u>Flashing point:</u>	>110°C
<u>Chemical Structure</u>	
<chem>CH3CCl2COOH</chem>	
<u>CAS No :</u>	75-99-0
<u>Source of Substance:</u>	Tokyo Kasei Kogyo Co., Ltd.
<u>Lot. No. :</u>	FBS01
<u>Purity:</u>	%
<u>Vehicle:</u>	Saline

Treated Time (Hr)	Concentration (mg/ml)	No. of Meta-phase	Poly-ploid (%)	Judge	Cell with Structural Chromosome Aberration (%)							Judge
					Gap	CTB	CTE	CSB	CSE	Total		
										-G	+G	
Saline 24		200	0	—	0	0	0	0	0	0	0	—
48		200	0	—	0	0	0	0	0	0	0	—
Test Chemical												
24	0.50	200	0.5	—	0.5	1.0	0.5	0	0	1.5	2.0	—
	1.0	200	0	—	0.5	0	0.5	0	0	0.5	1.0	—
	2.0	200	0.5	—	1.5	2.5	2.0	0	0	4.5	6.0	±
	3.0				No observation for metaphase							
	4.0				No observation for metaphase							
48	0.50	200	0.5	—	1.0	0.5	0	0	0	0.5	1.5	—
	1.0	200	0.5	—	1.0	2.0	0.5	0	0	2.5	3.5	—
	2.0	200	1.0	—	4.0	5.5	4.0	0	0	8.5	12.5	+
	3.0				No observation for metaphase							
	4.0				No observation for metaphase							
Positive Control												
(MMC) 24	0.00005	200	0	—	0.5	7.5	40.5	0	0	44.5	44.5	+
48	0.00005	200	2.0	—	1.5	14.0	56.5	0.5	1.0	62.5	63.0	+

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	CSB	CSE	Total		
										-G	+G	
Saline -		200	0.5	-	0	0	0	0	0	0	0	-
+		200	1.5	-	0.5	0.5	0	0	0	0.5	1.0	-
Test Chemical												
-	0.50	200	1.0	-	0	0.5	0.5	0	0	1.0	1.0	-
	1.0	200	0	-	0	0	0.5	0	0	0.5	0.5	-
	2.0	200	0.5	-	1.0	0	0	0	0	0	1.0	-
	3.0	200	4.0	-	1.0	0	0.5	0	0	0.5	1.5	-
	4.0				No observation for metaphase							
+	0.50	200	0	-	0	0.5	0	0	0	0.5	0.5	-
	1.0	200	0	-	0	0	0	0	0	0	0	-
	2.0	200	0	-	0	0	0	0	0	0	0	-
	3.0				No observation for metaphase							
	4.0				No observation for metaphase							
Positive Control												
(B(a)P) -		200	0	-	0	0	0.5	0	0	0.5	0.5	-
+		200	0	-	1.5	2.0	23.5	0	0	24.5	25.5	+