

Dichloroacetic acid (ジクロロ酢酸)

Experimental Data

Chemical Name:	Dichloroacetic acid
Synonym	Acetic acid, dichloro-
Molecular weight:	128.9
Melting point:	-4~9.7°C(9-11°C)
Boiling point:	193~194°C
Flashing point:	>110°C
Chemical Structure	
$C l_2 C H C O O H$	
CAS No :	79-43-6
MITI No :	(2)-1161
ML No :	2-(4)-657
Source of Substance:	Wako Pure Chemical Ind., Ltd.
Lot.No. :	KPF0562
Purity:	%
Vehicle:	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	—	0.5	0	0.5	0	0	0.5	1.0	—	
	48	200	0	—	0	0	0	0	0	0	0	—	
Test Chemical													
	24	0.25	200	1.0	—	0	0	0	0	0	0	0	—
		0.5	200	1.0	—	0	0	0	0	0	0	0	—
		1.0	200	0	—	0	0	3.5	0	0	3.5	3.5	—
		1.5	200	0.5	—	1.0	1.5	13.0	0	0	13.5	14.0	+
		2.0	130	0	—	32.3	43.1	76.5	0	0	90.0	90.0	+
	48	0.25	200	0	—	0	0	0	0	0.5	0.5	0.5	—
		0.5	200	0.5	—	0	0	0	0	0	0	—	
		1.0	200	0	—	0	0	0	0	0	0	—	
		1.5	200	0	—	0.5	0	0.5	0	0	0.5	1.0	—
		2.0	200	6.5	±	7.0	11.0	45.0	0	0	48.5	48.5	+
	Positive Control												
(MMC)	24	0.00005	200	1.0	—	1.5	7.0	39.0	0	0.5	43.0	44.5	+
	48	0.00005	200	1.0	—	1.5	4.0	54.5	0.5	0	55.5	55.5	+

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	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												
-	1.5	200	0.5	-	1.5	0.5	1.0	0	0	1.5	3.0	-
	2.0	200	1.5	-	2.0	1.0	9.0	0	0	9.5	11.5	+
	2.5	200	1.0	-	1.5	5.5	22.0	0	0	24.5	25.5	+
	3.0	200	0.5	-	7.0	11.0	52.0	0	0.5	53.5	54.0	+
	3.5				No observation for metaphase							
+	1.5	200	1.5	-	0	0	0	0	0	0	0	-
	2.0	200	1.0	-	1.0	0	0.5	0	0	0.5	1.5	-
	2.5	200	2.5	-	3.0	3.5	16.5	0	0	17.5	18.5	+
	3.0				No observation for metaphase							
	3.5				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	+