

[1,1-ジメチルヒドrazin]

Chemical Name; 1,1-Dimethylhydrazine

Synonym ; Dimazine

UDMH

ジマジン

非対称ジメチルヒドrazin

Molecular Weight ; 60.10

Melting Point ; - 58 °C [CHCD, Merck]

Boiling Point ; 63 °C [CHCD]

62 - 64 °C (753mmHg) [Aldrich]

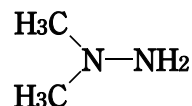
63.9 °C [Merck]

Flashing Point ; - 15 °C [CHCD]

1 °C [Aldrich]

Molecular Formula; C₂H₈N₂

Chemical Structure



CAS No. ; 57-14-7

MITI No. ; (2)-200

ML No. ; -

Specified Chemical Substances; -

Source of Substance; Wako Junyaku Kogyo Co., Ltd.

Lot No. ; WDF5495

Purity ; 99.7 %

Vehicle ; Saline

Experimental Data without Metabolic Activation

Substance	Treatment		No. of Metaphase	Polyploid (%)	Judge-ment	Cell with Structural Chromosome Aberration (%)							Judge-ment
	Time (h)	Concentration (mg/ml)				Chromatid		Chromosome		Total			
						Gap	CTB	CTE	CSB	CSE	-G	+G	
Saline	24		200	1.5	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-
	48		200	2.0	-	0.0	2.0	0.0	0.0	0.0	2.0	2.0	-
Test Chemical	24	0.005	200	1.0	-	0.0	0.0	0.5	0.0	0.0	0.5	0.5	-
		0.01	200	0.5	-	0.0	0.5	2.5	0.0	0.0	3.0	3.0	-
		0.02	200	0.0	-	0.0	3.0	4.0	0.0	0.0	7.0	7.0	±
		0.04	200	0.0	-	0.5	4.0	13.0	0.0	0.0	15.5	15.5	+
	48	0.08	180	0.6	-	0.6	2.8	5.6	0.0	0.0	8.3	8.3	±
		0.005	200	2.0	-	0.0	0.5	1.0	0.0	0.0	1.5	1.5	-
		0.01	200	0.0	-	0.5	1.0	2.5	0.0	0.0	3.5	3.5	-
		0.02	200	0.5	-	0.5	3.0	6.5	0.0	0.0	9.5	10.0	+
	0.04	200	0.0	-	2.0	6.0	27.0	0.0	0.0	30.0	30.5	+	
	0.08	200	0.0	-	3.0	8.0	22.5	0.0	0.0	28.0	28.5	+	
Positive Control	24	0.00004	200	0.5	-	0.0	6.0	31.0	0.0	0.0	33.5	33.5	+
[MMC]	48	0.00004	200	1.5	-	2.0	5.0	35.0	0.0	0.5	38.0	38.0	+

※ There was no observation for metaphase with both treatment of 24Hr and 48Hr at 0.12mg/ml.

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

Judgement for

Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation

; Group 2B

Experimental Data with Metabolic Activation

Treatment			No. of Metaphase	Polyploid (%)	Judge- ment	Cell with Structural Chromosome Aberration (%)							Judge- ment
Substance	S9 mix	Concent- ration (mg/ml)				Chromatid		Chromosome		Total			
						Gap	CTB	CTE	CSB	CSE	-G	+G	
Saline	-		200	3.5	-	0.5	0.0	0.5	0.0	0.0	0.5	1.0	-
	+		200	2.5	-	0.0	0.0	0.5	0.0	0.5	1.0	1.0	-
Test Chemical	-	0.05	200	0.0	-	0.0	0.0	2.5	0.0	0.0	2.5	2.5	-
		0.1	200	0.0	-	0.0	1.5	7.0	0.0	0.0	7.0	7.0	±
		0.2	200	1.5	-	0.0	2.0	8.5	0.0	0.0	10.0	10.0	+
		0.4	200	0.0	-	0.0	2.5	9.5	0.0	0.5	11.0	11.0	+
		0.8	114	0.0	-	0.0	0.0	8.8	0.0	0.0	8.8	8.8	±
	+	0.1	200	1.0	-	0.0	0.0	1.5	0.0	0.0	1.5	1.5	-
		0.2	200	3.0	-	0.0	0.0	6.0	0.0	0.0	6.0	6.0	±
		0.4	200	3.5	-	0.5	0.0	9.5	0.0	0.0	9.5	10.0	+
		0.8	200	1.5	-	0.0	1.0	5.0	0.0	0.0	6.0	6.0	±
		1.2	140	0.0	-	0.0	1.4	2.9	0.0	0.0	4.3	4.3	-
Positive Control [B(a)P]	-	0.01	200	3.0	-	0.0	0.5	0.0	0.0	0.0	0.5	0.5	-
	+	0.01	200	4.0	-	1.0	5.0	28.0	0.0	0.0	30.0	30.5	+

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