N,N-Dimethylaniline (*N,N*-ジメチルアニリン)

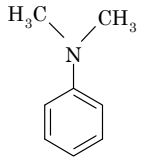
Experimental Data (Short treatments)

Chemical Name ; *N,N*-Dimethylaniline

Synoym ; *N,N*-Dimethylphenylamine
(Dimethylamino)benzene
N,N-Dimethylbenzenamine

Molecular Weight ; 121.18
Melting Point ; 2.5℃[CHCD]
Boiling Point ; 193 ℃[CHCD]
Flashing Point ; 61 ℃[Merck]
Molecular Formula ; $C_8H_{11}N$

Chemical Structure ;



CAS No. ; 121-69-7
METI No. ; (3)-114
MHLW No. ; −
Specified Chemical Substances ; −

Source of Substance; Wako Pure Chemical Industries, Ltd.
Lot No. ; LDE4983
Purity ; 99.9%

Vehicle ; Dehydrated DMSO

Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
			No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
				ctb	cte	csb	cse								
6-18	−	[DMSO] (1%)	200	0	1.0	0	0	0	1.0	0.5	100	200	0	0	0
		0.2	200	0.5	0	0	0	0	0.5	0.5	94	205	2.4	0	2.4
		0.4†	200	0	0	0	0	0	0	0.5	91	206	1.9	1.0	2.9
		0.6†	200	1.0	2.0	0	0	0	3.0	0.5	90	209	3.8	0.5	4.3
		0.8†	200	0	1.5	0	0	0	1.5	0	73	206	2.9	0	2.9
		1.0†	TOX								31	TOX			
		[MMC] (0.00012)	200	9.5	39.5	0	0	0	45.0	0	−	204	2.0	0	2.0
6-18	+	[DMSO] (1%)	200	0	0.5	0	0	0	0.5	0.5	100	200	0	0	0
		0.02	200	0	0	0	0	0	0	0	99	202	1.0	0	1.0
		0.03	200	0	0.5	0	0	0	0.5	0.5	90	208	3.8	0	3.8
		0.04	200	0.5	6.5	0	0	0	7.0	0	88	215	7.0	0	7.0
		0.05	200	3.5	14.5	0	0	0	17.5	1.5	78	225	11.1	0	11.1
		0.06	200	13.0	62.5	0	0	0	66.0	0.5	71	202	1.0	0	1.0
		[B[a]P] (0.01)	200	2.5	45.5	0	0	0	46.5	0.5	−	200	0	0	0

Judgement for
Chromosomal Aberration in CHL/IU ; Positive

IARC Evaluation ; Group 3

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h

† The precipitation of test chemical was observed in the culture medium at initiation, however, after the treatment the test chemical dissolved.

Experimental Data without Metabolic Activation (Continuous treatments)

Treatment Time (h)	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
		No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Polyploid	Others	Total
			ctb	cte	csb	cse								
24-0	[DMSO] (1%)	200	1.0	1.5	0	0	0	2.5	0	100	202	1.0	0	1.0
	0.1	200	4.0	2.0	0	0	0	5.5	0	92	205	2.4	0	2.4
	0.2	200	3.5	4.5	0	0.5	0	7.0	0.5	85	202	1.0	0	1.0
	0.4†	200	4.0	9.0	0	0	0	11.5	0.5	80	204	2.0	0	2.0
	0.6†	200	6.5	24.0	1.0	0	0	27.5	1.5	70	201	0.5	0	0.5
	0.8†	136	10.3	16.2	0	0	0	23.5	0.7	40	136	0	0	0
	[MMC] (0.00004)	200	23.0	57.0	0.5	0	0	64.5	1.5	−	200	0	0	0
48-0	[DMSO] (1%)	200	1.0	0.5	0	0	0	1.5	0.5	100	202	1.0	0	1.0
	0.4†	200	2.0	0	0	0	0	2.0	0	93	200	0	0	0
	0.6†	200	1.0	2.0	0	0.5	0	3.5	0	78	201	0.5	0	0.5
	0.8†	200	0.5	4.5	0	1.0	0	5.5	1.0	27	202	1.0	0	1.0
	1.0†	TOX								21	TOX			
	[MMC] (0.00004)	200	27.5	66.5	0	0	0	73.5	1.5	−	203	1.5	0	1.5

※ Test conditions: Treatment time ; 24h or 48h, Recovery time ; 0h

† The precipitation of test chemical was observed in the culture medium at initiation, however, after the treatment the test chemical dissolved.