3,5-Dichloroaniline (3, 5-ｼﾞｸﾛﾛｱﾆﾘﾝ)

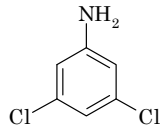
Experimental Data (Short treatments)-1

Chemical Name ; 3,5-Dichloroaniline

Synoym ; 3,5-Dichlorobenzenamine

Molecular Weight ; 162.02
Melting Point ; 52-53℃ [CHCD]
Boiling Point ; 259-260℃(741mmHg)[CHCD]
Flashing Point ; >110℃ [Aldrich]
Molecular Formula ; $C_6H_5Cl_2N$

Chemical Structure ;



CAS No. ; 626-43-7
METI No. ; (3)-261
MHLW No. ; －
Specified Chemical Substances ; －

Source of Substance; Wako Pure Chemical Industries, Ltd.
Lot No. ; LEP0287
Purity ; 99.2%

Vehicle ; Dehydrated DMSO

Judgement for
Chromosomal Aberration in CHL/IU ; Positive

IARC Evaluation ; not yet cited

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	1.0	0.5	0	0	0	1.5	0.5	100	201	0.5	0	0.5
		0.015	200	0.5	1.0	0	0	0	1.5	0.5	79	206	2.9	0	2.9
		0.03	200	0.5	1.5	0	0	0	1.5	0	76	206	2.9	0	2.9
		0.06	200	0	1.0	0	0	0	1.0	0.5	74	216	7.4	0	7.4
		0.09	200	0	1.5	0	0	0	1.5	0.5	67	232	12.9	0.9	13.8
		0.12	200	0.5	2.0	0	0	0	2.5	0	85	212	5.7	0	5.7
		0.15	200	1.0	2.5	0	0	0	3.5	0.5	68	213	6.1	0	6.1
		[MMC] (0.00012)	200	21.5	64.5	0	0	0	71.5	1.5	－	202	1.0	0	1.0
6-18	＋	[DMSO] (1%)	200	0	1.0	0	0	0	1.0	0	100	201	0.5	0	0.5
		0.06	200	0.5	0.5	0	0	0	1.0	0.5	95	204	2.0	0	2.0
		0.09	200	0	1.0	0	0	0	1.0	0	88	222	9.9	0	9.9
		0.12	200	1.5	2.5	0	0.5	0	4.5	1.0	81	237	14.8	0.8	15.6
		0.15	200	3.0	5.5	0	0	0	8.5	0.5	66	210	4.8	0	4.8
		0.18	200	7.0	13.0	0	0	0	19.0	1.5	58	200	0	0	0
		[B[a]P] (0.01)	200	2.5	27.0	0	0	0	28.0	0	－	201	0.5	0	0.5

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

Experimental Data (Short treatments)-2

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	2.0	0.5	0	0.5	0	3.0	0.5	100	206	2.9	0	2.9
		0.075	200	1.0	2.0	0	0	0	3.0	0.5	91	213	5.6	0.5	6.1
		0.10	200	1.5	1.5	0	0	0	2.5	0.5	78	222	9.9	0	9.9
		0.13	200	0.5	0.5	0	0	0	1.0	0	64	210	4.8	0	4.8
		0.15	200	2.5	5.0	0	0	0	7.0	0	64	205	2.4	0	2.4
		0.18	200	7.0	12.0	0	0	0	16.0	1.0	39	202	1.0	0	1.0
		0.20	TOX								27	TOX			
		[MMC] (0.00012)	200	19.0	67.5	0	0	0	71.5	1.5	−	200	0	0	0

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

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	Poly-ploid	Others	Total
			ctb	cte	csb	cse								
24-0	[DMSO] (1%)	200	0	1.0	0	0	0	1.0	0	100	202	1.0	0	1.0
	0.03	200	1.0	0	0	0	0	1.0	1.0	80	204	2.0	0	2.0
	0.06	200	1.5	1.0	0	0	0	2.5	0.5	75	211	5.2	0	5.2
	0.09	200	1.5	1.0	0	0	0	2.5	0.5	59	203	1.5	0	1.5
	0.12	122	0	1.6	0	0	0	1.6	0.8	70	123	0.8	0	0.8
	0.15	TOX								54	TOX			
	0.18	TOX								36	TOX			
	[MMC] (0.00004)	200	10.5	50.5	0	0	0	55.0	0.5	—	203	1.5	0	1.5
48-0	[DMSO] (1%)	200	1.0	0.5	0	0	0	1.5	0	100	201	0.5	0	0.5
	0.03	200	0.5	1.0	0	0	0	1.5	1.0	75	201	0.5	0	0.5
	0.045	200	0	0.5	0	0	0	0.5	0.5	62	207	3.4	0	3.4
	0.06	200	0	0.5	0.5	0	0	1.0	0.5	51	212	5.7	0	5.7
	0.075	200	0.5	1.0	0	0	0	1.5	0	42	215	7.0	0	7.0
	0.09	191	0	2.6	0	0	0	2.6	0.5	28	218	12.4	0	12.4
	[MMC] (0.00004)	200	15.0	64.5	0.5	0	0	67.5	1.0	—	201	0.5	0	0.5

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