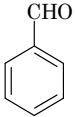


Benzaldehyde (ベンズアルデヒド)

Experimental Data (Short treatments)

Chemical Name ; <u>Benzaldehyde</u> Synonym ; <u>Benzoic aldehyde</u> <u>Benzoic acid aldehyde</u> <u>Phenylmethanal</u> Molecular Weight ; 106.12 Melting Point ; -26°C[Aldrich] Boiling Point ; 178-179°C[Aldrich] Flashing Point ; 63°C[Aldrich] Molecular Formula ; C ₇ H ₆ O Chemical Structure ; 	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	0.5	0.5	0	0	0	1.0	0.5	100	200	0	0	0
			0.11	200	2.5	1.5	0	0	0	4.0	1.0	84	208	3.8	0	3.8
			0.22	200	1.5	1.0	0	0	0	2.5	0.5	86	205	2.4	0	2.4
			0.44	200	2.0	3.0	0	0	0	4.5	1.5	78	242	17.4	0	17.4
			0.66	200	3.0	3.0	0	0	0	5.5	1.0	67	233	14.2	0	14.2
			0.88	200	0.5	5.0	0	0	0	5.5	1.0	65	215	7.0	0	7.0
			1.1	200	6.0	10.0	0	0	0	14.5	1.5	56	208	3.8	0	3.8
			[MMC] (0.00012)	200	17.0	70.5	0	0.5	0	76.5	1.5	-	201	0.5	0	0.5
	6-18	+	[DMSO] (1%)	200	0	0	0	0	0	0	100	200	0	0	0	
			0.44	200	0	1.5	0	0	0	1.5	0	88	203	1.5	0	1.5
			0.66	200	1.5	1.0	0	0	0	1.5	0	99	201	0	0.5	0.5
			0.88	200	0.5	1.5	0	0	0	2.0	0	107	206	2.9	0	2.9
			1.1	200	0.5	0	0	0	0	0.5	0	92	200	0	0	0
			[B[a]P] (0.01)	200	5.5	24.5	0	0	0	27.5	0	-	200	0	0	0

Judgement for Chromosomal Aberration in CHL/IU ; Positive

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

IARC Evaluation ; not yet cited

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	1.0	2.0	0	0	0	3.0	0.5	100	203	1.5	0	1.5
	0.15	200	2.5	1.5	0	0	0	4.0	1.0	74	208	3.8	0	3.8
	0.30	200	1.5	4.5	0	0	0	6.0	1.0	61	202	1.0	0	1.0
	0.45	200	4.5	7.5	0	0	0	12.0	0	52	202	1.0	0	1.0
	0.60	200	7.5	8.5	0	0	0	15.0	1.0	46	204	2.0	0	2.0
	[MMC] (0.00004)	200	200	49.0	0	0	0	51.0	1.0	—	201	0.5	0	0.5
48-0	[DMSO] (1%)	200	200	0.5	0	0	0	0.5	0	100	201	0.5	0	0.5
	0.15	200	0.5	1.5	0	0	0	2.0	0	68	205	2.4	0	2.4
	0.30	200	1.0	1.5	0	0	0	2.5	0.5	47	283	29.3	0	29.3
	0.45	101	3.0	11.9	0	0	0	11.9	1.0	36	310	67.4	0	67.4
	0.60	115	6.1	24.4	0	0	0	25.2	0.9	32	130	11.5	0	11.5
	[MMC] (0.00004)	200	15.5	64.0	0	0	0	68.5	0.5	—	202	1.0	0	1.0

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