

Cobalt(II)acetate tetrahydrate (酢酸コバルト(II)＝四水和物)

Experimental Data (Short treatments)

Chemical Name ; <u>Cobalt(II)acetate tetrahydrate</u> Synonym ; <u>Cobaltous acetate</u> Molecular Weight ; 249.08 Melting Point ; - Boiling Point ; - Flashing Point ; - Molecular Formula ; C ₄ H ₁₄ CoO ₈ Chemical Structure ; (CH ₃ COO) ₂ Co·4H ₂ O CAS No. ; 6147-53-1 METI No. ; (2)-693 MHLW No. ; - Specified Chemical Substances ; - Source of Substance; Wako Pure Chemical Industries, Ltd. Lot No. ; CKH2754 Purity ; 99.8% Vehicle ; Ultrapure H ₂ O	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	-	[H ₂ O] (10%)	200	0	0	0	0	0	0	1.5	100	200	0	0	0	
			0.02	200	0	0	0	0	0	0	0	0.5	94	202	1	0	1
			0.04	200	0.5	2	0	0	0	0	2.5	1.5	87	200	0	0	0
			0.08	200	18	55.5	0	0	0	0	58	2	81	200	0	0	0
			0.12	200	30	71	0	0	0	0	76	3.5	61	202	1	0	1
			0.16	200	33.5	63.5	0	0	0	0	70	7	45	200	0	0	0
			[MMC] (0.00012)	200	10	49.5	0	0	0	0	54.5	0.5	-	200	0	0	0
	6-18	+	[H ₂ O] (10%)	200	0	1	0	0	0	1	0	100	200	0	0	0	
			0.02	200	0	0	0	0	0	0	0	0.5	85	202	1	0	1
			0.04	200	0	0.5	0	0	0	0	0.5	0	80	201	0.5	0	0.5
			0.08	200	9	23.5	0	0	0	0	25.5	1	70	202	0.5	0.5	1
			0.12	200	32	62	0	0	0	0	69	2	63	200	0	0	0
			0.16	200	32.5	65.5	0	0	0	0	73.5	2.5	51	201	0.5	0	0.5
			[B[a]P] (0.01)	200	5.5	22.5	0	0	0	0	26.5	1.5	-	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	[H ₂ O] (10%)	200	0	0	0	0	0	0	0.5	100	200	0	0	0
	0.005	200	1.5	0.5	0	0	0	2	0.5	80	200	0	0	0
	0.01	200	11	11	0	0	0	20	2	77	201	0.5	0	0.5
	0.02	200	16.5	16	0	0	0	30	5	73	200	0	0	0
	0.03	200	15.5	23	0	0	0	35	3.5	62	200	0	0	0
	0.04	45	8.9	6.7	0	0	0	15.6	0	58	45	0	0	0
	[MMC] (0.00004)	200	13	34.5	0	0	0	42.5	1	—	200	0	0	0
48-0	[H ₂ O] (10%)	200	0.5	0	0	0	0	0.5	0	100	201	0.5	0	0.5
	0.005	200	0	0	0	0	0	0	0	82	200	0	0	0
	0.01	200	1.5	0	0	0	0	1.5	0	79	200	0	0	0
	0.02	200	13.5	11.5	0	0	0	20.5	3	67	200	0	0	0
	0.03	155	51.6	66.5	0	0	0	83.9	6.5	47	156	0.6	0	0.6
	0.04	TOX								31	TOX			
	[MMC] (0.00004)	200	11	40	0	0	0	44.5	1	—	200	0	0	0

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