

*O,O*-Dimethyl phosphorochloridothioate  
(*O,O*-ジメチルホスホクロロチオアート)

Experimental Data (Short treatments)

Chemical Name ; <i>O,O</i> -Dimethyl phosphorochloridothioate Synonym ; <i>O,O</i> -Dimethyl thiophosphoryl chloride <i>O,O</i> -Dimethyl chlorothiophosphate	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								
Molecular Weight ; 160.56 Melting Point ; - Boiling Point ; 68°C(12mmHg)[CHCD] Flashing Point ; 105°C [Aldrich] Molecular Formula ; C <sub>2</sub> H <sub>6</sub> ClO <sub>2</sub> PS  Chemical Structure ; $\begin{array}{c} \text{S} \\    \\ \text{Cl}-\text{P}-\text{O}-\text{CH}_3 \\   \\ \text{OCH}_3 \end{array}$  CAS No. ; 2524-03-0 METI No. ; (2)-1946 MHLW No. ; - Specified Chemical Substances ; -  Source of Substance; Tokyo Kasei Kogyo Co., Ltd. Lot No. ; FAW01 Purity ; 98.4%  Vehicle ; Dehydrated acetone	6-18	-	[Acetone] (0.5%)	200	0	0	0	0	0	0	100	200	0	0	0	
			0.06	200	0	1	0	0	0	1	0.5	87	200	1.5	0	1.5
			0.12	200	0	0.5	0	0	0	0.5	0	88	200	3	0	3
			0.18	200	0	1.5	0	0	0	1.5	0.5	65	200	15.5	0	15.5
			0.24	200	2	3.5	0	0	0	5.5	1	61	200	28	0	28
			0.30	200	7	5.5	0	0	0	12.5	1	57	200	5.5	0	5.5
			0.36	200	6	14.5	0	0	0	18.5	2	51	200	3.5	0	3.5
			[MMC] (0.00012)	200	21.5	65.5	0	0	0	72.5	1	-	200	0	0	0
	6-18	+	[Acetone] (0.5%)	200	0	0.5	0	0	0.5	0	100	200	1	0	1	
			0.06	200	0.5	0	0	0	0.5	0	89	200	0	0	0	
			0.12	200	1	1	0	0	0	2	0	69	200	2	0	2
			0.24	200	0.5	3	0	0	0	3.5	0	54	200	12	0	12
			0.36	200	4	6.5	0	0	0	10	2	42	200	21.5	0	21.5
			0.48	200	26	90.5	0	0	0	93	0	44	200	0.5	0	0.5
			0.60	TOX								27	TOX			
			[B[a]P] (0.01)	200	5	26.5	0	0	0	30.5	2	-	200	0	0	0

Judgement for Chromosomal Aberration in CHL/IU ; Positive

IARC Evaluation ; not yet cited

※ 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	[Acetone] (0.5%)	200	0	0.5	0	0	0	0.5	0.5	100	200	0	0	0
	0.10	200	0.5	1	0	0	0	1.5	0	87	200	5	0	5
	0.15	200	1	1.5	0	0.5	0	3	0	81	200	15	0	15
	0.20	200	3	6	0	0	0	8.5	0	66	200	3	0	3
	0.30	200	16.5	47	0	0	0	57	1.5	64	200	0	0	0
	0.40	200	15.5	69	0	0	0	76	1	54	200	0.5	0	0.5
	0.50	111	18	70.3	0	0	0	76.6	0	56	111	0	0	0
	[MMC] (0.00004)	200	11.5	37	0	0	0	42	1.5	—	200	0	0	0
48-0	[Acetone] (0.5%)	200	0	0	0	0	0	0	0	100	200	0.5	0	0.5
	0.05	200	0	0.5	0	0	0	0.5	0	93	200	0.5	0	0.5
	0.10	200	0	0	0	0	0	0	0.5	82	200	2.5	0	2.5
	0.20	200	2	0.5	0	0	0	2.5	0.5	56	200	19.5	0	19.5
	0.30	200	1.5	7.5	0	0	0	9	0.5	27	200	21.5	0	21.5
	0.40	59	11.9	23.7	0	0	0	30.5	0	20	59	18.6	0	18.6
	[MMC] (0.00004)	200	21	81	0	0	0	84.5	1.5	—	200	1	0	1

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