

Chemical Name ; <u>Poly(oxymethylene)</u> Synonym ; <u>Polyacetal</u> <u>Paraformaldehyde</u> <u>ホリアセタール</u> Molecular Weight ; - Melting Point ; 163-165°C[Aldrich] Boiling Point ; - Flashing Point ; 70°C[CHCD] Molecular Formula ; - Chemical Structure (CH ₂ O) _n CAS No. ; 9002-81-7 MITI No. ; (9)-1941 ML No. ; - Specified Chemical Substances ; - Source of Substance; Tokyo Kasei Kogyo Co., Ltd. Lot No. ; GF01 Purity ; 95.7% Vehicle ; Dehydrated DMSO	Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)						Gap g (%)	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] 1.0%	200	1	0	0	0	0	1	0	100	200	0	0	0	
			0.0010	200	0	0	0	0	0	0	0	0	96	200	0	0	0
			0.0030	200	0.5	2.5	0	0	0	0	2.5	0	60	200	4	0	4
			0.0050	200	2	10	0	0	0	0	11	0	53	200	6	0	6
			0.0070	200	8	31	0	0	0	0	33.5	0	49	200	5	0	5
			[MMC] 0.00012	200	16	57	0	0	0	0	62	1	-	200	0.5	0	0.5
	6-18	+	[DMSO] 1.0%	200	0.5	0	0	0	0	0.5	0	100	200	0	0	0	
			0.010	200	0	0	0	0.5	0	0.5	0	89	200	0	0	0	
			0.012	200	0	0	0	0	0	0	0	81	200	1	0	1	
			0.016	200	0.5	1	0	0	0	0	1.5	0	76	200	1.5	0	1.5
			0.020	200	2	5.5	0	0.5	0	0	7	0	52	200	2.5	0	2.5
			[B[a]P] 0.01	200	4.5	26	0	0.5	0	0	28	1	-	200	1.5	0	1.5

Judgement for Chromosomal Aberration in CHL ; Positive

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

※ The culture bottle was sealed and cultured standing after adding the test substance.

IARC Evaluation ; not yet cited

Experimental Data without Metabolic Activation (Continuous Treatments)

Treatment Time (h)	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap g (%)	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] 1.0%	200	0.5	0	0	0	0	0.5	0	100	200	0	0	0	
	0.0020	200	1	2.5	0	0	0	3.5	1	97	200	5.5	0	5.5	
	0.0030	200	11	24	0	0.5	0	29	2.5	72	200	10	0	10	
	0.0040	200	15.5	55.5	0	0	0	60	4	51	200	5	0	5	
	0.0050	107	13.1	53.3	0	0	0	56.1	3.7	35	107	8.4	0	8.4	
	0.0060	TOX								23	TOX				
	[MMC] 0.00004	200	6.5	21.5	0	0.5	0	27	2	—	200	1	0	1	
48-0	[DMSO] 1.0%	200	0.5	0	0	0	0	0.5	0.5	100	200	0.5	0	0.5	
	0.0010	200	2	1	0	0	0	3	0.5	107	200	0	0	0	
	0.0020	200	0.5	1	0	0	0	1	0.5	87	200	3.5	0	3.5	
	0.0030	200	4	8.5	0	0.5	0	11	1	61	200	8	0	8	
	0.0040	200	15.5	39.5	0	0	0	42	1	29	200	18	0	18	
	0.0050	TOX								12	TOX				
	[MMC] 0.00004	200	16	39	0	0	0	45.5	2	—	200	1	0	1	

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

※ The culture bottle was sealed and cultured standing after adding the test substance.

TOX : Metaphase cell division was not observed.