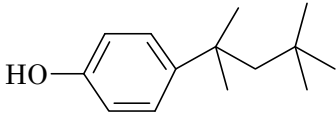


4-(1,1,3,3,-Tetramethylbutyl)phenol (4-(1,1,3,3-テトラメチルブチル)フェノール)

Experimental Data (Short treatments)

Chemical Name	: 4-(1,1,3,3,-Tetramethylbutyl)phenol
Synonym	: <i>p</i> -(1,1,3,3,-Tetramethylbutyl)phenol 4- <i>t</i> -Octylphenol <i>p</i> - <i>t</i> -Octylphenol 2-(4-hydroxyphenyl)-2,4,4-trimethylpentane
Molecular Weight	: 206.33
Melting Point	: 81-83°C[CHCD]
Boiling Point	: 290 °C[CHCD]
Flashing Point	: -
Molecular Formula	: C ₁₄ H ₂₂ O
Chemical Structure	: 
CAS No.	: 140-66-9
MITI No.	: (3)-503
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Wako Pure Chemical Industries Ltd.
Lot No.	: ASF2974
Purity	: 97.5%
Vehicle	: Dehydrated DMSO

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	0	0	0	0	0.5	0	100	204	2.0	0	2.0	
		0.005	200	0.5	0	0	0	0	0	0.5	0	83	202	1.0	0	1.0	
		0.01	200	0.5	0	0	0	0	0	0.5	0	89	201	0.5	0	0.5	
		0.02	200	0	0	0	0	0	0	0	0	86	206	2.9	0	2.9	
		0.03	200	0.5	0	0	0	0	0	0.5	0.5	40	203	1.5	0	1.5	
		0.04	TOX									9	TOX				
		[MMC] (0.0001)	200	8	52.5	0	0	0	0	57	0	-	200	0	0	0	
6-18	+	[DMSO] (1%)	200	0	0.5	0	0	0	0	0.5	0	100	204	2.0	0	2.0	
		0.01	200	0	1	0	0	0	0	1	0	88	204	2.0	0	2.0	
		0.02	200	0	0.5	0	0	0	0	0.5	0	81	204	2.0	0	2.0	
		0.03	200	0.5	2	0	0	0	0	2.5	0	76	212	5.7	0	5.7	
		0.04	200	1.5	11	0	0	0	0	11.5	1	51	220	7.3	1.8	9.1	
		0.05	200	6.5	14.5	0	0	0	0	18	0.5	35	203	1.0	0.5	1.5	
		0.06	TOX									6	TOX				
		[B[a]P] (0.01)	200	2	43.5	0	0	0	0	44.5	0	-	200	0	0	0	

Judgement for
Chromosomal Aberration in CHL ; Positive

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h
TOX: Metaphase cell division was not observed.

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	0.5	1	0	0	0	1.5	0.5	100	206	2.9	0	2.9	
	0.006	200	0.5	1	0	0	0	1.5	0.5	92	204	2.0	0	2.0	
	0.012	200	0	1	0	0	0	1	0	82	203	1.5	0	1.5	
	0.018	200	1.5	1	0	0	0	2.5	0	82	208	3.4	0.5	3.8	
	0.024	200	1	1	0	0	0	2	1	66	203	1.5	0	1.5	
	0.030	TOX									42	TOX			
	0.036	TOX									24	TOX			
	[MMC] (0.00004)	200	11.5	39	0	0	0	46.5	0.5	—	203	1.5	0	1.5	
48-0	[DMSO] (1%)	200	0.5	0	0	0	0	0.5	0	100	203	1.5	0	1.5	
	0.006	200	0	0.5	0	0	0	0.5	0	87	204	2.0	0	2.0	
	0.012	200	0	0.5	0	0	0	0.5	0	83	204	2.0	0	2.0	
	0.018	200	0	0.5	0	0	0	0.5	0	66	203	1.5	0	1.5	
	0.024	200	0	0.5	0	0	0	0.5	0	34	201	0.5	0	0.5	
	0.030	TOX									14	TOX			
	0.036	TOX									10	TOX			
	[MMC] (0.00004)	200	16.5	62.5	0	0	0	66.5	0.5	—	201	0.5	0	0.5	

※ Test conditions: Treatment time ; 24h or 48h, Recovery time ; 0h
 TOX: Metaphase cell division was not observed.