1,3-Benzenediol (1,3-ﾍﾞﾝｾﾞﾝｼﾞｵｰﾙ)

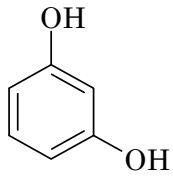
Experimental Data (Short treatments)-1

Chemical Name ; 1,3-Benzenediol

Synoym ; Resorcinol
1,3-Dihydroxybenzene
Resorcin
ﾚｿﾞﾙｼﾉｰﾙ

Molecular Weight ; 110.11
Melting Point ; 111℃[CHCD]
Boiling Point ; 280℃[Merck]
Flashing Point ; 127℃[CHCD]
Molecular Formula ; $C_6H_6O_2$

Chemical Structure ;



CAS No. ; 108-46-3
MITI No. ; (3)-543
ML No. ; －
Specified Chemical Substances ; －

Source of Substance ; Wako Pure Chemical Industries Ltd.
Lot No. ; SDR3907
Purity ; 99.5%

Vehicle ; Ultra pure H_2O

Judgement for
Chromosomal Aberration in CHL ; Positive

IARC Evaluation ; Group 3

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_2O] (10%)	200	0	0	0	0	0	0	0	100	204	2.0	0	2.0
		0.069	200	0	0	0	0	0	0	0	99	204	2.0	0	2.0
		0.14	200	0	3	0	0	0	3	0	91	204	2.0	0	2.0
		0.28	200	0.5	11.5	0	0	0	12	0	89	210	4.3	0.5	4.8
		0.55	200	0	3.5	0	0	0	3.5	0	66	219	8.7	0	8.7
		1.1	200	0	3	0	0	0	3	0	51	208	3.8	0	3.8
		[MMC] (0.0001)	200	4.5	54.5	0	0	0	57	1	－	203	1.5	0	1.5
6-18	＋	[H_2O] (10%)	200	0	1	0	0	0	1	0	100	201	0.5	0	0.5
		0.01	200	0	0	0	0	0	0	0	89	203	1.5	0	1.5
		0.02	200	0	0	0	0	0	0	0	77	202	1.0	0	1.0
		0.03	200	0	0.5	0	0	0	0.5	0	75	203	1.5	0	1.5
		0.04	200	0	0	0	0	0	0	0	72	202	1.0	0	1.0
		0.05	200	0.5	4	0	0	0	4	0	49	206	2.9	0	2.9
		0.06	200	1	3	0	0	0	3	0	13	207	3.4	0	3.4
		[B[a]P] (0.01)	200	3.5	42	0	0	0	43	1	－	201	0.5	0	0.5

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

Experimental Data (Short treatments)-2

Treat-ment Time (h)	S9 mix	Concent-ration (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_2O] (10%)	200	0.5	0	0	0	0	0.5	0	100	207	3.4	0	3.4
		0.097	200	0	1	0	0	0	1	0	103	205	2.4	0	2.4
		0.14	200	0.5	1.5	0	0	0	2	0	99	204	2.0	0	2.0
		0.19	200	0	3	0	0	0	3	0	95	204	2.0	0	2.0
		0.28	200	0.5	8.5	0	0	0	8.5	0	85	207	3.4	0	3.4
		0.39	200	3	15	0	0	0	16	0	71	217	7.8	0	7.8
		0.55	200	0.5	9	0	0	0	9	0	65	219	8.7	0	8.7
		0.78	200	1.5	6.5	0	0	0	8	0	60	232	13.8	0	13.8
		1.1	200	0	4.5	0	0	0	4.5	0	57	219	8.7	0	8.7
		[MMC] (0.0001)	200	10.5	58.5	0	0	0	62.5	0	−	201	0.5	0	0.5

※ Test conditions: 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	Polyploid	Others	Total
			ctb	cte	csb	cse								
24-0	[H_2O] (10%)	200	0	0	0	0	0	0	0	100	200	0	0	0
	0.038	200	1	1	0	0	0	2	0	67	200	0	0	0
	0.075	200	0	0	0	0	0	0	0	54	200	0	0	0
	0.15	200	1.5	0	0	0	0	1.5	0	44	200	0	0	0
	0.3	200	1	2.5	0	0	0	3.5	0.5	41	200	0	0	0
	0.6	TOX								39	TOX			
	[MMC] (0.00004)	200	5.5	38	0	0	0	41	0.5	−	201	0.5	0	0.5
48-0	[H_2O] (10%)	200	0	0	0	0	0	0	0	100	200	0	0	0
	0.019	200	0	0.5	0	0	0	0.5	0	67	202	1.0	0	1.0
	0.038	200	0.5	0	0	0	0	0.5	0	47	200	0	0	0
	0.075	200	0	0	0	0	0	0	0	44	202	1.0	0	1.0
	0.15	200	2.5	11	0	0	0	13	0	33	203	1.5	0	1.5
	0.3	200	9	32.5	0	0	0	38.5	0.5	22	200	0	0	0
	[MMC] (0.00004)	200	7.5	71	0	0	0	74	0	−	200	0	0	0

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