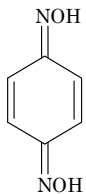


Chemical Name	: <u>p</u> -Benzoquinone dioxime
Synonym	: <u>1,4</u> -Benzoquinone dioxime <u>p</u> -キノジオキソム ジオキソム <u>p</u> -ベンゾキン
Molecular Weight	: 138.13
Melting Point	: 243°C [Aldrich]
Boiling Point	: -
Flashing Point	: -
Molecular Formula	: C <sub>6</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub>
Chemical Structure	
CAS No.	: 105-11-3
MITI No.	: (3)-1009
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FBR02
Purity	: 97.5%
Vehicle	: DMSO

Substance	Treatment		No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)									
	Time (h)	Concentration (mg/ml)		%	Judgement	Gap g	Chromatid			Chromosome		Others	Total		Judgement
							ctb	cte	csb	cse	-g		+g		
DMSO	24	0.5%	200	1	-	0	0.5	1	0	0	0	1.5	1.5	-	
	48	0.5%	200	0.5	-	0	0	0	0	0	0	0	0	-	
Test Chemical	24	0.01	200	1	-	0.5	0.5	0.5	0	0	0	1	1.5	-	
		0.02	200	0	-	0	1	0.5	0	0	0	1.5	1.5	-	
		0.03	200	0.5	-	0	0.5	1	0	0	0	1.5	1.5	-	
		0.04	200	0.5	-	0.5	4.5	3	0	0	0	7.5	8	±	
		0.05	200	0	-	2	10.5	7	0.5	0	0	15.5	17	+	
	48	0.01	200	0.5	-	0	0	0.5	0	0	0	0.5	0.5	-	
		0.02	200	0	-	0.5	1.5	2	0	0	0	3	3.5	-	
		0.03	200	0.5	-	1	4	5.5	0	0	0	8.5	9.5	±	
		0.04	200	0.5	-	1	9	6	0	0	0	13.5	14.5	+	
		0.05	159	0	-	1.9	18.2	12.6	0	0	0	25.8	27.0	+	
Positive Control [MMC]	24	0.00004	200	0	-	0.5	10	10	0.5	0.5	0	20	20.5	+	
	48	0.00004	200	0	-	1	11.5	12	0	1	0	23.5	24.5	+	

Judgement for Chromosomal Aberration in CHL : Positive

※ There was no obserbation for methaphase with treatment of 24Hr and 48Hr at 0.06mg/ml.

IARC Evaluation : Group 3

Experimental Data with Metabolic Activation

(C9603-2/2)

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)								
Substance	S9 mix	Concent- ration (mg/ml)		(%)	Judge- ment	Gap g	Chromatid		Chromosome		Others	Total		Judge- ment
							ctb	cte	csb	cse		-g	+g	
DMSO	-	0.5%	200	0	-	0.5	0.5	0	0	0	0	0.5	1	-
	+	0.5%	200	0	-	0	0	0	0	0	0	0	0	-
Test Chemical	-	0.02	200	0.5	-	0	1.5	0	0	0	0	1.5	1.5	-
		0.04	200	2	-	0	0.5	0.5	0	0	0	1	1	-
		0.06	200	1.5	-	0	3	1.5	0	0	0	4.5	4.5	-
		0.08	200	8	±	1	13.5	12.5	0	0	0	19.5	20.5	+
		0.1	200	3.5	-	1.5	24	25.5	0	0	0	33	33.5	+
	+	0.02	160	1.3	-	0	0	0	0	0	0	0	0	-
		0.04	200	1	-	0	0	1	0	0	0	1	1	-
		0.06	200	0.5	-	0	1	1.5	0	0	0	2.5	2.5	-
		0.08	200	1	-	0.5	6.5	11	0	0	0	13.5	14	+
		0.1	125	0	-	0.8	17.6	32.8	0	0	0	38.4	38.4	+
Positive Control [B[a]P]	-	0.01	200	0.5	-	0	0	0	0	0	0	0	-	
	+	0.01	200	1	-	1.5	13	25	0	1	0	31	32.5	+

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

※ There was no obserbation for methaphase with treatment of -S9 and +S9 at 0.12mg/ml.