Chemical Name;Bromoacetyl bromide
Synonym ;Monobromoacetyl bromide
ﾌﾞﾛﾓｱｾﾁﾙﾌﾞﾛﾐﾄﾞ
ﾌﾞﾛﾓ酢酸ﾌﾞﾛﾏｲﾄﾞ
ﾌﾞﾛﾑ酢酸ﾌﾞﾛﾏｲﾄﾞ

Molecular Weight ; 201.85
Melting Point ; — ℃
Boiling Point ; 150 ℃ [CHCD]
147 - 150 ℃[Aldrich]
Flashing Point ; — ℃
Molecular Formula; $C_2H_2Br_2O$

Chemical Structure

$BrCH_2COBr$

CAS No. ; 598-21-0
MITI No. ; (9)-1275
ML No. ; —
Specified Chemical Substances; —

Source of Substance; Tokyo Kasei Kogyo Co.,Ltd.
Lot No. ; FHC01
Purity ; ≧ 99.5 %

Vehicle ; Dehydrated Acetone

Judgement for
Chromosomal Aberration in CHL ; **Positive**

IARC Evaluation ; not yet cited

Exprimental Data without Metabolic Activation

Treatment						Cell with Structural Chromosome Aberration (%)							
							Chromatid		Chromosome		Total		
Substance	Time (h)	Concent-ration (mg/ml)	No. of Metaphase	Polyploid (%)	**Judge-ment**	Gap	CTB	CTE	CSB	CSE	−G	+G	**Judge-ment**
Acetone	24	0.5 %	200	1.0	−	1.0	1.0	0.0	0.0	0.0	1.0	2.0	−
	48	0.5 %	200	0.0	−	1.0	0.0	1.0	0.0	0.0	1.0	1.5	−
Test Chemical	24	0.002	200	3.0	−	0.5	2.0	1.5	0.0	0.0	3.5	4.0	−
		0.004	200	0.0	−	0.5	2.5	1.5	0.0	0.0	4.0	4.5	−
		0.006	200	0.5	−	4.0	13.0	6.5	0.0	0.0	18.0	19.0	+
		0.008	155	1.3	−	4.5	20.0	9.7	0.0	0.0	25.2	25.2	+
		0.010	136	0.7	−	2.9	27.2	15.4	0.0	0.0	33.8	34.6	+
	48	0.002	200	0.0	−	0.0	1.0	0.0	0.0	0.0	1.0	1.0	−
		0.004	200	0.0	−	0.5	3.0	4.0	0.0	0.0	6.5	7.0	±
		0.006	178	2.2	−	0.6	11.2	12.4	0.0	0.0	18.5	18.5	+
		0.008	95	1.1	−	4.2	40.0	34.7	0.0	1.1	52.6	53.7	+
		0.010				No observation for metaphase							
Positive Control [MMC]	24	0.00004	200	2.0	−	0.0	7.0	18.5	0.0	0.0	24.5	24.5	+
	48	0.00004	200	2.0	−	1.5	13.5	33.5	0.0	0.0	41.5	41.5	+

Exprimental Data with Metabolic Activation

Treatment			No. of Metaphase	Polyploid (%)	Judge-ment	Cell with Structural Chromosome Aberration (%)							
							Chromatid		Chromosome		Total		
Substance	S9 mix	Concent-ration (mg/ml)				Gap	CTB	CTE	CSB	CSE	−G	+G	Judge-ment
Acetone	−	0.5 %	200	0.5	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
	+	0.5 %	200	0.5	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
Test Chemical	−	0.005	200	2.0	−	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−
		0.01	200	1.0	−	0.0	1.0	0.5	0.0	0.0	1.5	1.5	−
		0.02	200	0.5	−	0.5	1.0	2.0	0.0	0.5	3.5	4.0	−
		0.04				No observation for metaphase							
		0.06				No observation for metaphase							
	+	0.005	200	1.0	−	0.0	0.0	0.5	0.0	0.0	0.5	0.5	−
		0.01	200	1.0	−	0.0	0.0	0.5	0.0	0.0	0.5	0.5	−
		0.02	200	1.5	−	0.5	2.0	3.5	0.0	0.0	5.5	6.0	±
		0.04				No observation for metaphase							
		0.06				No observation for metaphase							
Positive Control (B(a)P)	−	0.01	200	0.0	−	0.0	0.5	0.0	0.0	0.0	0.5	0.5	−
	+	0.01	200	1.5	−	0.5	3.0	17.0	0.0	0.0	20.5	20.5	+