

Chemical Name	: <u>Ethyl bromoacetate</u>
Synonym	: <u>Ethyl 2-bromoacetate</u> <u>Bromoacetic acid ethyl ester</u> <u>2-ブ'ロモ酢酸エチル</u> <u>エチルブ'ロモアセテート</u>
Molecular Weight	: 167.00
Melting Point	: -
Boiling Point	: 159°C[Aldrich]
Flashing Point	: 48°C[Aldrich]
Molecular Formula	: C ₄ H ₇ BrO ₂
Chemical Structure	BrCH₂COOC₂H₅
CAS No.	: 105-36-2
MITI No.	: (2)-2636
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FGF01
Purity	: 99.6%
Vehicle	: Distilled H ₂ O

Judgement for
Chromosomal Aberration in CHL ; Negative

IARC Evaluation : not yet cited

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	-	[H ₂ O] 10%	200	0.5	0	0	0	0	0	0.5	0	100	200	0	0	0
		0.000050	200	0	1	0	0	0	0	1	0	103	200	1	0	1
		0.00010	200	0.5	0	0	0	0	0	0.5	0	98	200	0.5	0	0.5
		0.00020	200	1	0	0	0	0	0	1	0.5	74	200	1	0	1
		0.00030	200	1	1.5	0	0	0	0	2.5	0.5	30	200	4.5	0	4.5
		0.00040	119	2.5	8.4	0	0	0	0	9.2	0.8	4	119	2.5	0	2.5
		[MMC] 0.00012	200	21.5	64	0	0	0	0	68	3	-	200	0.5	0	0.5
6-18	+	[H ₂ O] 10%	200	1	1	0	0	0	1.5	0	100	200	0	0	0	
		0.0025	200	0	0	0	0	0	0	0	67	200	0.5	0	0.5	
		0.0050	200	0	0	0	0	0	0	0	60	200	0.5	0	0.5	
		0.010	200	0.5	1	0	0	0	1.5	0	26	200	0.5	0	0.5	
		0.015	200	0	4	0.5	0	0	4.5	1	6	200	0.5	0	0.5	
		0.020	159	3.1	4.4	0	0.6	0	8.2	1.9	4	159	0	0	0	
		[B[a]P] 0.01	200	5	41	0	0	0	41.5	1	-	200	0	0	0	

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

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

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	[H ₂ O] 10%	200	0	0	0	0.5	0	0.5	0	100	200	0	0	0
	0.00010	200	0	0	0	0	0	0	0	99	200	0	0	0
	0.00020	200	0	0	0	0	0	0	0	82	200	0	0	0
	0.00030	200	1	0.5	0	0	0	1	0	24	200	0	0	0
	0.00040	TOX								0	TOX			
	[MMC] 0.00004	200	5.5	23	0	0	0	25.5	1	—	200	1	0	1
48-0	[H ₂ O] 10%	200	0.5	0	0	0	0	0.5	0	100	200	0.5	0	0.5
	0.00010	200	0	0	0	0	0	0	0	101	200	0	0	0
	0.00020	200	0	0	0	0	0	0	0	83	200	1	0	1
	0.00030	200	0	0	0	0	0	0	0	19	200	0	0	0
	0.00040	TOX								0	TOX			
	[MMC] 0.00004	200	9	36.5	0	0	0	40.5	1	—	200	0.5	0	0.5

※ 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.