

Chloroform (クロロホルム)

Chemical Name	: <u>Chloroform</u>
Synonym	: <u>Trichloromethane</u> <u>FLON-20</u>
Molecular Weight	: 119.38
Melting Point	: -63.2°C[CHCD]
Boiling Point	: 61.3°C[CHCD]
Flashing Point	: -
Molecular Formula	: CHCl ₃
Chemical Structure:	$\begin{array}{c} \text{Cl} \\ \\ \text{Cl}-\text{C}-\text{H} \\ \\ \text{Cl} \end{array}$
CAS No.	: 67-66-3
METI No.	: (2)-37
MHLW No.	: -
Specified Chemical Substances:	-
Source of Substance:	Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: GG01
Purity	: 99%
Vehicle	: Air
Exposure Condition	: 37°C, 24hr
Culture Condition	: 37°C, 24hr

Mutagenicity in Bacterial Test: Positive

IARC Evaluation : Group 2B

Experimental Data-1

Conc. %	Number of Revertants/plate		
	Base-substitution		
	WP2/pKM101		
	S9-	S9+ without glutathion	S9+ with glutathion ¹⁾
Air	(60)	(64)	(59)
0.05	55	87	128
	(55)	(82)	(113)
0.1	52	70	91
	(62)	(80)	(94)
0.2	53	83	123
	(51)	(85)	(115)
0.5	46	87	131
	(46)	(89)	(139)
1	81	106	108
	(71)	(103)	(109)
2	59	69	100
	(56)	(83)	(115)
5	17 *	31 *	28 *
	(24 *)	(36 *)	(24 *)
Judgement	-	-	+
Specific Mutagenicity #			0.5%
Positive Control	MMC (249)	2-AA (270)	2-AA (147)

* Growth inhibition was observed.

The concentration which was two times of the negative control value was shown.

1) 5 μ mol/plate.

Experimental Data-2

(B0204-1/1)

Conc. %	Number of Revertants/plate		
	Base-substitution		
	WP2/pKM101		
	S9-	S9+ without glutathion	S9+ with glutathion ¹⁾
Air	(53)	(66)	(55)
0.05	47	81	86
	(51)	(79)	(86)
0.1	56	72	89
	(55)	(67)	(90)
0.2	51	78	120
	(49)	(71)	(103)
0.5	38	96	121
	(42)	(87)	(123)
1	49	77	120
	(55)	(82)	(117)
2	47	81	114
	(43)	(84)	(120)
5	24 *	16 *	17 *
	(26 *)	(14 *)	(21 *)
Judgement	-	-	+
Specific Mutagenicity #			0.5%
Positive Control	MMC (230)	2-AA (281)	2-AA (138)