

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 Formular	: CHCl <sub>3</sub>
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 <sup>1)</sup>
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 <sup>1)</sup>
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 )