

## Isobutene (イソブテン)

## Experimental Data-1

(B8604-1/1)

Chemical Name	: Isobutene
Synonym	: <u>2-Methyl-1-propene</u> <u>Isobutylene</u> <u>ブテン</u>
Molecular Weight	: 56.10
Melting Point	: -140 °C[Aldrich]
Boiling Point	: -6.9°C[Aldrich]
Flashing Point	: <-10 °C[CHCD]
Molecular Formula	: C <sub>4</sub> H <sub>8</sub>
Chemical Structure	(H <sub>3</sub> C) <sub>2</sub> C=CH <sub>2</sub>
CAS No.	: 115-11-7
MITI No.	: (2)-16
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FA001
Purity	: 99%
Vehicle	: Air
Exposure Condition	: 37°C, 48hr
Culture Condition	: 37°C, 48hr

Mutagenicity in Bacterial Test ; Negative

IARC Evaluation ; not yet cited

Conc. %	Number of Revertants/plate									
	Base-substitution						Frame-shift			
	TA100		TA1535		WP2 <sub>uvrA</sub>		TA98		TA1537	
Air	S9-	S9+/40%	S9-	S9+/40%	S9-	S9+/40%	S9-	S9+/40%	S9-	S9+/40%
	( 112 )	( 115 )	( 20 )	( 17 )	( 47 )	( 45 )	( 21 )	( 28 )	( 7 )	( 18 )
2	80 87 ( 84 )	92 100 ( 96 )	26 32 ( 29 )	22 17 ( 20 )	45 44 ( 45 )	32 30 ( 31 )	16 14 ( 15 )	22 20 ( 21 )	7 8 ( 8 )	16 10 ( 13 )
5	84 106 ( 95 )		33 20 ( 27 )		43 32 ( 38 )		20 20 ( 20 )		4 7 ( 6 )	
6		104 99 ( 102 )		16 17 ( 17 )		33 39 ( 36 )		28 16 ( 22 )		16 14 ( 15 )
9	71 96 ( 84 )	87 97 ( 92 )	26 16 ( 21 )	16 16 ( 16 )	41 42 ( 42 )	39 35 ( 37 )	11 13 ( 12 )	31 26 ( 29 )	8 7 ( 8 )	16 18 ( 17 )
21	85 79 ( 82 )	95 92 ( 94 )	21 19 ( 20 )	19 20 ( 20 )	30 31 ( 31 )	28 47 ( 38 )	10 12 ( 11 )	26 31 ( 29 )	6 6 ( 6 )	15 18 ( 17 )
47	66 81 ( 74 )		12 16 ( 14 )		27 35 ( 31 )		11 10 ( 11 )		8 5 ( 7 )	
48		48 * 44 * ( 46 * )		16 15 ( 16 )		33 29 ( 31 )		22 13 ( 18 )		8 13 ( 11 )
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 434 )	2-AA ( 347 )	NaN <sub>3</sub> ( 277 )	2-AA ( 371 )	AF-2 ( 353 )	2-AA ( 628 )	AF-2 ( 405 )	2-AA ( 151 )	9-AA ( 972 )	2-AA ( 60 )

\* Growth inhibition was observed.