

## 1-Butene (1-ブテン)

## Experimental Data-1

(B8602-1/1)

Chemical Name	: <u>1-Butene</u>
Synonym	: <u>But-1-ene</u> <u>1-Butylene</u> <u>ブテン</u>
Molecular Weight	: 56.10
Melting Point	: -185 °C[Aldrich]
Boiling Point	: -6.3°C[Aldrich]
Flashing Point	: -80 °C[CHCD]
Molecular Formula	: C <sub>4</sub> H <sub>8</sub>
Chemical Structure	CH <sub>3</sub> CH <sub>2</sub> CH=CH <sub>2</sub>
CAS No.	: 106-98-9
MITI No.	: (2)-16
ML No.	: -
Specified Chemical Substances	: -
Source of Substance	: Tokyo Kasei Kogyo Co., Ltd.
Lot No.	: FAS01
Purity	: 98.5%
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%
		( 101 )	( 117 )	( 34 )	( 18 )	( 52 )	( 49 )	( 17 )	( 32 )	( 7 )
2	83 106 ( 95 )	96 84 ( 90 )	30 29 ( 30 )	16 19 ( 18 )	35 41 ( 38 )	54 34 ( 44 )	11 13 ( 12 )	27 18 ( 23 )	3 6 ( 5 )	14 13 ( 14 )
4	84 93 ( 89 )	117 104 ( 111 )	30 22 ( 26 )	19 21 ( 20 )	48 56 ( 52 )	41 32 ( 37 )	12 15 ( 14 )	22 35 ( 29 )	6 9 ( 8 )	14 22 ( 18 )
8	82 120 ( 101 )	105 93 ( 99 )	28 29 ( 29 )	17 13 ( 15 )	54 47 ( 51 )	44 40 ( 42 )	13 17 ( 15 )	44 26 ( 35 )	8 3 ( 6 )	18 22 ( 20 )
15		82 113 ( 98 )		16 19 ( 18 )		53 48 ( 51 )		22 34 ( 28 )		21 13 ( 17 )
16	71 85 ( 78 )		30 22 ( 26 )		48 39 ( 44 )		6 8 ( 7 )		5 7 ( 6 )	
40	84 80 ( 82 )		13 23 ( 18 )		45 56 ( 51 )		11 9 ( 10 )		5 3 ( 4 )	
42		58 79 ( 69 )		14 14 ( 14 )		45 46 ( 46 )		31 35 ( 33 )		10 15 ( 13 )
Judgement	-	-	-	-	-	-	-	-	-	-
Specific Mutagenicity										
Positive Control	AF-2 ( 370 )	2-AA ( 450 )	NaN <sub>3</sub> ( 318 )	2-AA ( 419 )	AF-2 ( 328 )	2-AA ( 578 )	AF-2 ( 331 )	2-AA ( 155 )	9-AA ( 632 )	2-AA ( 75 )