



>>Entry Name: 2-Methylpropene, 9CI

ENTRY UNDER REVIEW

Synonym(s): Isobutene. 1,1-Dimethylethylene. Isobutylene. γ -Butylene

CAS Registry Number: 115-11-7

Related CAS Registry Numbers(s): 7756-94-7 9003-27-4 15220-85-6

$(\text{H}_3\text{C})_2\text{C}=\text{CH}_2$

Molecular Formula: C_4H_8

Molecular Weight: 56.107

Accurate Mass: 56.0626

Percentage Composition: C 85.63%; H 14.37%

Source/Synthesis: Manuf. by catalytic dehydrogenation of 2-Methylpropane [BGV13-F](#)

Use/Importance: Used in manuf. of methyl *tert*-butyl ether (MTBE), methyl methacrylate, butyl rubber, polybutenes, pivalic acid, butylated hydroxyanisole, etc.

Physical Description: Gas

Melting Point: Mp -139°

Boiling Point: Bp -6.6°

Solubility: Prac. insol. H_2O ; sol. org. solvs.

Other Data: Undergoes cationic polym. and copolym., e.g. with isoprene, to give butyl rubber. Q/e values for copolym., Q 0.023, e -1.20 . Copolym. with vinyl chloride: r_{IB} 0.08, r_{VC} 2.05 (typical values, 60°); Q 0.033; e -0.96 . Copolym. with vinylidene chloride r_{VDC} 0.11, r_{IB} 1.5 (typical values, -39°); r_{VDC} 1.00, r_{IB} 0.40 (typical values, 0°); Q 0.033; e -0.96

Hazard & Toxicity: Extremely flammable, fl. p. $<-10^\circ$, autoignition temp. 465° . An asphyxiant

Aldrich: 29546-9

>>Derivative: Ozonide

Molecular Formula: $\text{C}_4\text{H}_8\text{O}_3$

Molecular Weight: 104.105

Accurate Mass: 104.047345

Percentage Composition: C 46.15%; H 7.75%; O 46.11%

Melting Point: Mp -43°

Boiling Point: Bp $42-42.5^\circ$

References:

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