



>>Entry Name: 1-(Ethenyloxy)-2-methylpropane, 9CI

Synonym(s): Isobutyl vinyl ether, 8CI

CAS Registry Number: 109-53-5

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

Molecular Formula: $\text{C}_6\text{H}_{12}\text{O}$

Molecular Weight: 100.16

Accurate Mass: 100.088815

Percentage Composition: C 71.95%; H 12.08%; O 15.97%

Boiling Point: Bp 82-84°

Density: d_4^{25} 0.764

Refractive Index: n_D^{20} 1.3970

Other Data: Undergoes cationic living polym. Q/e values for copolym., Q 0.030, e -1.27. Copolym. with vinyl chloride: r_{VE} 0.02, r_{VC} 2.0 (typical values, 50°)

Aldrich: 27835-1

Fluka: 58660

Rare Chemicals Library: S39347-9

References:

Schildknecht, C.F. *et al.*, *Ind. Eng. Chem.*, 1947, **39**, 182

Rowlands, D.C. *et al.*, *J.O.C.*, 1952, **17**, 807

Wichterle, O. *et al.*, *Coll. Czech. Chem. Comm.*, 1961, **26**, 1099, (*synth*)

Yuki, H. *et al.*, *Bull. Chem. Soc. Jpn.*, 1969, **42**, 3546; 1970, **43**, 3195, (*synth, cmr*)

Sarvetnick, H.A., *Polyvinyl Chloride*, Van Nostrand Reinhold, 1969, 22, (*copolym, reactivity ratios*)

Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **23**, 910, (*copolym, reactivity ratios*)

Greenley, R.Z., *J. Macromol. Sci., Chem., Part A*, 1980, **14**, 427, (*Q/e values*)

Kennedy, J.P. *et al.*, *Chemtracts: Macromol. Chem.*, 1990, **1**, 262, (*polym*)

Sawamoto, M. *et al.*, *Makromol. Chem., Macromol. Symp.*, 1992, **60**, 47, (*polym*)