



>>Entry Name: Ethyl vinyl ether, 8CI

Synonym(s): Ethoxyethene, 9CI. Vinamar. Ethenyl ethyl ether. Vinyl ethyl ether

CAS Registry Number: 109-92-2

$\text{H}_3\text{CCH}_2\text{OCH}=\text{CH}_2$

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

Molecular Weight: 72.107

Accurate Mass: 72.057515

Percentage Composition: C 66.63%; H 11.18%; O 22.19%

Source/Synthesis: Manuf. from acetylene and ethanol

Use/Importance: Inhalation anaesthetic

Physical Description: Volatile liq.

Melting Point: Mp -115.8°

Boiling Point: Bp 35.5°

Solubility: Spar. sol. H_2O ; sol. EtOH, Et_2O

Density: d^{20}_4 0.759

Refractive Index: n^{20}_D 1.3767

Calculated Log P Data: Log P 1.01 (calc)

Other Data: Can be polym. in the liq. or vapour phase. Coml. material contains an inhibitor, e.g. triethanolamine. Q/e values for copolym., Q 0.018, e -1.80 . Copolym. with vinylidene chloride: r_{VDC} 3.2; r_{EVE} 0.0; Q 0.018; e -1.80

Hazard & Toxicity: Polym. violently on addn. of I_2 . Eye, skin and respiratory tract irritant. High vapour conc. narcotic. Prolonged or repeated exposure may cause liver damage. LD₅₀ (rat, orl) 6153 mg/kg. Extremely flammable, fl. p. -46° , autoignition temp. 200/202°

Aldrich: 42217-7

Fluka: 5010

>>Derivative: Dibromide

Synonym(s): 1,2-Dibromo-1-ethoxyethane, 9CI

CAS Registry Number: 2983-26-8

Molecular Formula: $\text{C}_4\text{H}_8\text{Br}_2\text{O}$

Molecular Weight: 231.915

Accurate Mass: 229.934187

Percentage Composition: C 20.72%; H 3.48%; Br 68.91%; O 6.90%

Physical Description: Very unstable liq.

Boiling Point: Bp₃₀ 75-78°

Solubility: Sol. H_2O

Density: d^{20}_4 1.732

References:

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