



>>Entry Name: 2-Hydroxyethyl acrylate, 8CI

Synonym(s): 2-Hydroxyethyl 2-propenoate, 9CI. Bisomer 2HEA

CAS Registry Number: 818-61-1

$\text{H}_2\text{C}=\text{CHCOOCH}_2\text{CH}_2\text{OH}$

Molecular Formula: $\text{C}_5\text{H}_8\text{O}_3$

Molecular Weight: 116.116

Accurate Mass: 116.047345

Percentage Composition: C 51.72%; H 6.94%; O 41.34%

Use/Importance: Important monomer

Physical Description: Liq.

Boiling Point: Bp 191°. Bp₁₂ 90-92°. Bp_{0.5} 57-60°

Density: d_4^{23} 1.011

Refractive Index: n_D^{20} 1.4600

Hazard & Toxicity: Skin and severe eye irritant. LD₅₀ (rat, orl) 650 mg/kg. Fl.p. 68°

Aldrich: 29281-8

Fluka: 1791

Rare Chemicals Library: S39267-7

>>Derivative: Me ether

Synonym(s): 2-Methoxyethyl acrylate

CAS Registry Number: 3121-61-7

Molecular Formula: $\text{C}_6\text{H}_{10}\text{O}_3$

Molecular Weight: 130.143

Accurate Mass: 130.062995

Percentage Composition: C 55.37%; H 7.74%; O 36.88%

Use/Importance: Monomer for acrylic rubbers

Physical Description: Liq.

Boiling Point: Bp₁₂ 59°

Density: d_4^{20} 1.013

Refractive Index: n_D^{20} 1.4272

Hazard & Toxicity: Skin irritant. LD₅₀ (rat, orl) 810 mg/kg; LD₅₀ (rbt, skn) 250 mg/kg. Exp. reprod. effects

Aldrich: 40891-3

>>Derivative: Et ether

Synonym(s): 2-Ethoxyethyl acrylate

CAS Registry Number: 106-74-1

Molecular Formula: $\text{C}_7\text{H}_{12}\text{O}_3$

Molecular Weight: 144.17

Accurate Mass: 144.078645

Percentage Composition: C 58.32%; H 8.39%; O 33.29%

Use/Importance: Monomer for acrylic rubbers

Physical Description: Liq.

Boiling Point: Bp₂₂ 78°

Density: d_4^{20} 0.982

Refractive Index: n_D^{20} 1.4282

Hazard & Toxicity: Skin and eye irritant. LD₅₀ (rat, orl) 1070 mg/kg

Aldrich: 40830-1

Fluka: 1740

>>Derivative: Butyl ether

CAS Registry Number: 7251-90-3

Molecular Formula: $\text{C}_9\text{H}_{16}\text{O}_3$

Molecular Weight: 172.224

Accurate Mass: 172.109945

Percentage Composition: C 62.77%; H 9.36%; O 27.87%

Physical Description: Liq.

Boiling Point: Bp₂ 64°

Density: d_4^{20} 0.9497

Refractive Index: n_D^{20} 1.4323