



Refractive Index: n_D^{20} 1.4068

Other Data: Vp 29 mmHg (20°). Q/e values for copolym., Q 0.41, e +0.55. Rate for radical polym., $k_p = 800 \text{ L mol}^{-1} \text{ s}^{-1}$, $k_t = 1.76 \times 10^{-6} \text{ L mol}^{-1} \text{ s}^{-1}$

Hazard & Toxicity: Flammable, fl. p. 9/10° (oc), autoignition temp. 372/383°. May polym. exothermically. Eye, skin and respiratory tract irritant. Skin sensitiser. LD₅₀ (rat, orl) 800 mg/kg. Exp. carcinogen (v. large doses). OES: long-term 5 ppm; short-term 15 ppm (Sk)

Aldrich: W24180-6

Fluka: 1750

Supelco: R30-2005

>>Derivative: Propyl ester

Synonym(s): Propyl acrylate

CAS Registry Number: 925-60-0

Molecular Formula: C₆H₁₀O₂

Molecular Weight: 114.144

Accurate Mass: 114.06808

Percentage Composition: C 63.14%; H 8.83%; O 28.03%

Physical Description: Liq.

Boiling Point: Bp 119°

Density: d_4^{20} 0.908

Refractive Index: n_D^{20} 1.4130

>>Derivative: Isopropyl ester

CAS Registry Number: 689-12-3

Molecular Formula: C₆H₁₀O₂

Molecular Weight: 114.144

Accurate Mass: 114.06808

Percentage Composition: C 63.14%; H 8.83%; O 28.03%

Boiling Point: Bp₁₀₃ 51-52°

>>Derivative: Butyl ester

Synonym(s): Butyl acrylate

CAS Registry Number: 141-32-2

Molecular Formula: C₇H₁₂O₂

Molecular Weight: 128.171

Accurate Mass: 128.08373

Percentage Composition: C 65.60%; H 9.44%; O 24.97%

Physical Description: Liq. with characteristic sharp acrylic odour

Melting Point: Mp -64.6°

Boiling Point: Bp 145°

Solubility: Insol. H₂O; sol. EtOH, Et₂O, Me₂CO

Density: d^{20} 0.899

Refractive Index: n_D^{20} 1.4180

Other Data: Vp 4 mmHg (20°). Q/e values for copolym., Q 0.38, e +0.85. Rate for radical polym., k_p 1237 L mol⁻¹ s⁻¹, k_t 6.18 x 10⁻⁶ L mol⁻¹ s⁻¹. Copolym. with vinyl chloride, r_{BA} 4.4, r_{VC} 0.07 (typical values, 45°), Q 0.50, e 1.06. Copolym. with vinylidene chloride: r_{VDC} 0.88; r_{BA} 0.83 (typical values): Q 0.38; e 0.85

Hazard & Toxicity: Lachrymator

Aldrich: 23492-3

Fluka: 1770

>>Derivative: 1-Methylpropyl ester

Synonym(s): *sec*-Butyl acrylate

CAS Registry Number: 2998-08-5

Molecular Formula: C₇H₁₂O₂

Molecular Weight: 128.171

Accurate Mass: 128.08373

Percentage Composition: C 65.60%; H 9.44%; O 24.97%

Boiling Point: Bp₅₀ 59-60°

Density: d_4^{20} 0.89

Refractive Index: n_D^{20} 1.4140

Other: PB: B27175