



>>Entry Name: 2-(Dimethylamino)ethyl methacrylate, 8CI

Synonym(s): [2-(Dimethylamino)ethyl] 2-methyl-2-propenoate, 9CI

CAS Registry Number: 2867-47-2

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

Molecular Formula: $\text{C}_8\text{H}_{15}\text{NO}_2$

Molecular Weight: 157.212

Accurate Mass: 157.110279

Percentage Composition: C 61.12%; H 9.62%; N 8.91%; O 20.35%

Use/Importance: Monomer for polymers with pendant tertiary amine functionality. Use in curing processes

Physical Description: Liq.

Boiling Point: Bp 182-190°. Bp₁₁ 71°. Bp₃ 50°

Solubility: Sol. H_2O

Density: d_{30}^{30} 0.926

pKa Value: $\text{p}K_a$ 7.94

Other Data: n_D 1.4396. Coml. samples contain hydroquinone monomethyl ether or a similar polym. inhibitor

Hazard & Toxicity: Strong lachrymator

Aldrich: 23490-7

Fluka: 64140

Sigma: M1033

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **1**, 1074A, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 675C, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 734B, (*ir*)

U.S. Pat., 1956, 2 832 800; *CA*, **52**, 16208, (*synth*)

Alfrey, T. *et al.*, *J. Polym. Sci.*, 1957, **23**, 533, (*props*)

Turyan, Y.I. *et al.*, *Zh. Obshch. Khim.*, 1968, **38**, 2181, (*props*)

Chiang, W.-Y. *et al.*, *J. Appl. Polym. Sci.*, 1989, **37**, 1669, (*use*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, DPG600