



>>Entry Name: *N*-(1,1-Dimethyl-3-oxobutyl)-2-propenamide, 9CI

Synonym(s): *N*-(1,1-Dimethyl-3-oxobutyl)acrylamide, 8CI. *N*-[2-(2-Methyl-4-oxopentyl)]acrylamide. Diacetone acrylamide

CAS Registry Number: 2873-97-4

$\text{H}_2\text{C}=\text{CHCONHC}(\text{CH}_3)_2\text{CH}_2\text{COCH}_3$

Molecular Formula: $\text{C}_9\text{H}_{15}\text{NO}_2$

Molecular Weight: 169.223

Accurate Mass: 169.110279

Percentage Composition: C 63.88%; H 8.93%; N 8.28%; O 18.91%

Use/Importance: Highly reactive vinyl monomer used in the manuf. of surface coatings, sealers, adhesives and lubricating oils

Physical Description: Cryst. solid

Melting Point: Mp 57-58°

Boiling Point: Bp₈ 120°. Bp_{0.2} 93-100° (lit. gives a pressure range)

Other Data: Hygroscopic

Hazard & Toxicity: LD₅₀ (mus, orl) 1303 mg/kg

Aldrich: 22234-8

Fluka: 41035

Rare Chemicals Library: S39987-6

References:

Aldrich Library of ¹³C and ¹H FT NMR Spectra, 1992, **1**, 1236A, (nmr)

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Coleman, L.E. *et al.*, *J. Polym. Sci., Part A*, 1965, **3**, 1601, (synth)

Yanagisawa, T. *et al.*, *Kobunshi Kako*, 1970, **19**, 610; *CA*, **74**, 42894c, (rev)

Coleman, L.E., *Encycl. Polym. Sci. Technol.*, 1971, **15**, 353, (rev)

Encyclopaedia of Polymer Science and Engineering, 1971, **15**, (rev, polymers)

Jochsberger, T. *et al.*, *J. Polym. Sci., Polym. Chem. Ed.*, 1978, **16**, 309, (polym)

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