



>>Entry Name: (Aminooxy)acetic acid, 9CI

Synonym(s): Carboxymethoxyamine. *O*-(Carboxymethyl)hydroxylamine. Hydroxylamine *O*-acetic acid

CAS Registry Number: 645-88-5

H2NOCH2COOH

Molecular Formula: C2H5NO3

Molecular Weight: 91.066

Accurate Mass: 91.026944

Percentage Composition: C 26.38%; H 5.53%; N 15.38%; O 52.71%

>>Derivative: Hydrochloride (2:1)

CAS Registry Number: 2921-14-4

Physical Description: Cryst. (2-propanol aq.)

Melting Point: Mp 156° (152-153°)

Hazard & Toxicity: LD₅₀ (mus, ipr) 65 mg/kg

Aldrich: C1340-8

Fluka: 21920

Sigma: A4508

>>Derivative: Me ester

Molecular Formula: C3H7NO3

Molecular Weight: 105.093

Accurate Mass: 105.042594

Percentage Composition: C 34.29%; H 6.71%; N 13.33%; O 45.67%

Boiling Point: Bp₁₁ 66.5°

>>Derivative: Et ester

Molecular Formula: C4H9NO3

Molecular Weight: 119.12

Accurate Mass: 119.058244

Percentage Composition: C 40.33%; H 7.62%; N 11.76%; O 40.29%

Boiling Point: Bp₁₅ 89-90°

>>Derivative: Amide

Molecular Formula: C2H6N2O2

Molecular Weight: 90.082

Accurate Mass: 90.042928

Percentage Composition: C 26.67%; H 6.71%; N 31.10%; O 35.52%

Physical Description: Solid (EtOH)

Melting Point: Mp 72.5-73.5°

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 591C, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **1**, 498D, (*nmr*)

Org. Synth., Coll. Vol., 3, 1955, 172, (*synth*)

Winternitz, F. *et al.*, *Bull. Soc. Chim. Fr.*, 1958, 664, (*synth*)

Kornowski, H. *et al.*, *Bull. Soc. Chim. Fr.*, 1966, 679, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, ALQ650