



>>Entry Name: *N*-[2-Hydroxy-1,1-bis(hydroxymethyl)ethyl]glycine, 9CI

Synonym(s): [Tris[(hydroxymethyl)methyl]amino]acetic acid. *N*-Tris(hydroxymethyl)methylglycine

CAS Registry Number: 5704-04-1

Related CAS Registry Numbers(s): 43058-97-5

$(\text{HOCH}_2)_3\text{CNHCH}_2\text{COOH}$

Molecular Formula: $\text{C}_6\text{H}_{13}\text{NO}_5$

Molecular Weight: 179.172

Accurate Mass: 179.079374

Percentage Composition: C 40.22%; H 7.31%; N 7.82%; O 44.65%

Use/Importance: Good's buffer with pH range 7.8-8.8

Physical Description: Hygroscopic cryst. (EtOH aq.)

Melting Point: Mp 182-184 dec.°

Solubility: Sol. H_2O

pKa Value: $\text{p}K_{\text{a}}$ 8.15 (20°)

Aldrich: 16378-3

Fluka: 93355

Sigma: T9784

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 564D, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **1**, 482C, (*nmr*)

Good, N.E. *et al.*, *Biochemistry*, 1966, **5**, 467, (*use*)

Stinson, R.A. *et al.*, *Can. J. Biochem.*, 1968, **46**, 43, (*use*)

Good, N.E. *et al.*, *Methods Enzymol.*, 1968, **24B**, 53, (*synth*)

Bates, R.G. *et al.*, *Anal. Chem.*, 1973, **45**, 1663, (*use*)

McGlothlin, C.D. *et al.*, *Anal. Lett.*, 1976, **9**, 245, (*props*)

Monthony, J.F. *et al.*, *Clin. Chem. (Winston-Salem, N.C.)*, 1978, **24**, 1825, (*use*)