



>>Entry Name: ***O*-Benzylhydroxylamine**

Synonym(s): *O*-(Phenylmethyl)hydroxylamine, 9Cl. α -Benzylhydroxylamine. Benzyloxyamine

CAS Registry Number: 622-33-3

$\text{PhCH}_2\text{ONH}_2$

Molecular Formula: $\text{C}_7\text{H}_9\text{NO}$

Molecular Weight: 123.154

Accurate Mass: 123.068414

Percentage Composition: C 68.27%; H 7.37%; N 11.37%; O 12.99%

Use/Importance: Derivatisation reagent for carbonyl compds. Used in the stereoselective conversion of β -hydroxyketones into 1,3-aminoalcohols

Physical Description: Liq.

Boiling Point: Bp_{30} 118-119°. Bp_{15} 90°

Other Data: Steam-volatile

>>Derivative: Hydrochloride

CAS Registry Number: 2687-43-6

Physical Description: Leaflets

Boiling Point: Subl. 230-250°

Aldrich: B2298-4

Fluka: 13455

Sigma: B8130

>>Derivative: *N*-2,4-Dinitrophenyl

Physical Description: Yellow needles (EtOH)

Melting Point: Mp 141°

>>Derivative: *N*-Me

CAS Registry Number: 22513-22-0

Molecular Formula: $\text{C}_8\text{H}_{11}\text{NO}$

Molecular Weight: 137.181

Accurate Mass: 137.084064

Percentage Composition: C 70.04%; H 8.08%; N 10.21%; O 11.66%

Physical Description: Light yellow oil

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 1266D, (*ir*)

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **2**, 563C, (*nmr*)

Anderson, N.H. *et al.*, *J.C.S. Perkin 1*, 1975, 825, (*pmr*, *synth*)

Magin, D.F., *J. Chromatogr.*, 1979, **178**, 219, (*use*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1981, **9**, 504; 1986, **12**, 273, (*use*)

Sharma, S.K. *et al.*, *J. Med. Chem.*, 1989, **32**, 357, (*synth*, *deriv*, *ir*, *pmr*)

Bonaccorsi, F. *et al.*, *Synth. Commun.*, 1997, **27**, 1143-1147, (*synth*)