



>>Entry Name: *N,N,O*-Tris(trimethylsilyl)hydroxylamine

Synonym(s): 1,1,1-Trimethyl-*N*-(trimethylsilyl)-*N*-[(trimethylsilyl)oxy]silanamine, 12Cl, 9Cl. 1,1,1,3,3,3-Hexamethyl-2-(trimethylsiloxy)disilazane, 8Cl

CAS Registry Number: 21023-20-1

(Me₃Si)₂NOSiMe₃

Molecular Formula: C₉H₂₇NOSi₃

Molecular Weight: 249.575

Accurate Mass: 249.140045

Percentage Composition: C 43.31%; H 10.90%; N 5.61%; O 6.41%; Si 33.76%

Source/Synthesis: Synth. from Me₃SiNHOSiMe₃ + MeLi + Me₃SiCl

Physical Description: Liq.

Melting Point: Mp -37°

Boiling Point: Bp₉₇ 128.5°. Bp_{3.5} 59-60°

Other Data: Acylation with AcCl → AcN(SiMe₃)OSiMe₃; with RNCO → R(Me₃Si)NCON(OSiMe₃)SiMe₃

References:

Witke, K. *et al.*, *J. Organomet. Chem.*, 1968, **15**, 37, (*synth, ir, Raman, pmr*)

Wannagat, U. *et al.*, *Monatsh. Chem.*, 1969, **100**, 750, (*synth*)

Buerger, H. *et al.*, *Monatsh. Chem.*, 1969, **100**, 766, (*ir, Raman*)

Roberts, B.P. *et al.*, *Chem. Comm.*, 1978, 545, (*photol*)

Barlos, K. *et al.*, *J. Magn. Reson.*, 1978, **31**, 363, (*N-14 nmr*)

Kozyukov, V.P. *et al.*, *Zh. Obshch. Khim.*, 1988, **58**, 1056; 1299, (*reactions*)

Muzovskaya, E.V. *et al.*, *Zh. Obshch. Khim.*, 1989, **59**, 396; *J. Gen. Chem. USSR (Engl. Transl.)*, 1989, **59**, 349, (*reactions*)