



>>Entry Name: Tris[(trimethylsilyl)oxy]borane

Synonym(s): Tri(trimethylsilyl) borate. Boron trimethylsiloxide

CAS Registry Number: 4325-85-3

B(OSiMe₃)₃

Molecular Formula: C₉H₂₇BO₃Si₃

Molecular Weight: 278.378

Accurate Mass: 278.136106

Percentage Composition: C 38.83%; H 9.78%; B 3.88%; O 17.24%; Si 30.27%

Source/Synthesis: Synth. by heating (Me₃Si)₂NH + H₃BO₃, or from (Me₃Si)₂O + B₂O₃

Physical Description: Liq.

Melting Point: Mp -35°

Boiling Point: Bp 184°

Density: d²⁰ 0.83

Refractive Index: n_D²⁰ 1.3860

Other: Gelest SIT8718.0

References:

Voronkov, M.G. *et al.*, *Zh. Obshch. Khim.*, 1957, **27**, 1476-1483; 1981, **51**, 1678; *CA*, **52**, 3673c; **95**, 133014r, (*synth*)

Schmidbauer, H. *et al.*, *Angew. Chem., Int. Ed.*, 1962, **1**, 328, (*pmr*)

Marsmann, H.C. *et al.*, *Z. Naturforsch., B*, 1972, **27**, 1448-1451, (*Si-29 nmr*)

Mehrotra, S.K. *et al.*, *Indian J. Chem., Sect. A*, 1976, **14**, 137-138, (*synth*)

Bett, W. *et al.*, *J. Chem. Res., Synop.*, 1979, 33, (*ir, Raman*)

Biffar, W. *et al.*, *Chem. Ber.*, 1980, **113**, 333-341, (*O-17 nmr*)

Voronkov, M.G. *et al.*, *Zh. Obshch. Khim.*, 1981, **51**, 1678; *CA*, **95**, 133014r, (*synth*)

Wada, H. *et al.*, *Polyhedron*, 1985, **4**, 653-656, (*ms*)

Olah, G.A., *Synthesis*, 1991, 204-206, (*synth, B-11 nmr*)