



>>Entry Name: Tetrakis(dimethylamino)diborane(4), 8Cl

Synonym(s): Octamethyldiborane(4)tetramine, 10Cl, 9Cl. Tetra(dimethylamino)diboron

CAS Registry Number: 1630-79-1

(Me₂N)₂B-B(NMe₂)₂

Molecular Formula: C₈H₂₄B₂N₄

Molecular Weight: 197.926

Accurate Mass: 198.218706

Percentage Composition: C 48.55%; H 12.22%; B 10.92%; N 28.31%

Use/Importance: Useful precursor to other diboron compds.

Physical Description: Liq., sensitive to moisture but stable at 200° in dry air

Melting Point: Mp -33°

Boiling Point: Bp₉ 86-93°. Bp_{0.05} 42.5°

Solubility: Sol. CHCl₃

Density: d₂₂ 0.854

Refractive Index: n_D²¹ 1.4679

References:

Brotherton, R.J. *et al.*, *J.A.C.S.*, 1960, **82**, 6242, (*synth*)

Nöth, H. *et al.*, *Chem. Ber.*, 1961, **94**, 509, (*synth*)

Brubaker, G.L. *et al.*, *Inorg. Chem.*, 1969, **8**, 2804, (*ms*)

Cetinkaya, B. *et al.*, *Chem. Comm.*, 1971, 1370, (*pe*)

Nöth, H. *et al.*, *Chem. Ber.*, 1973, **106**, 1145, (*nmr*)

Davidson, G. *et al.*, *J.C.S. Dalton*, 1981, 306, (*ir, Raman*)

Brain, P.T. *et al.*, *J.C.S. Dalton*, 1991, 1195, (*ed, struct*)