



>>Entry Name: Tris(dimethylamino)borane, 8Cl

Synonym(s): Hexamethylboranetriamine, 10Cl, 9Cl. Tris(dimethylamino)borine. Tris(dimethylamino)boron

CAS Registry Number: 4375-83-1

B(NMe₂)₃

Molecular Formula: C₆H₁₈BN₃

Molecular Weight: 143.039

Accurate Mass: 143.159377

Percentage Composition: C 50.38%; H 12.68%; B 7.56%; N 29.38%

Use/Importance: Sterilant for control of *Cochliomyia hominivorax* (screwworm fly). Reagent for synth. of dimethylamides from carboxylic acids

Physical Description: Liq., sensitive to moisture

Melting Point: Mp -16.5°

Boiling Point: Bp 147°. Bp₉ 38°. Bp_{5.5} 33°

Solubility: Sol. Et₂O, C₆H₆

Refractive Index: n_D²⁴ 1.4435

Aldrich: 27973-0

References:

- Aldrich Library of FT-IR Spectra: Vapor Phase*, 1989, **3**, 1677D, (*ir*)
Burg, A.B. *et al.*, *J.A.C.S.*, 1951, **73**, 953, (*synth*)
Dewar, M.J.S. *et al.*, *J.A.C.S.*, 1965, **87**, 5510, (*ms*)
Clark, A.H. *et al.*, *Chem. Comm.*, 1969, 1082, (*ed struct*)
King, G.H. *et al.*, *Faraday Discuss. Chem. Soc.*, 1972, **54**, 70, (*pe*)
Nöth, H. *et al.*, *Chem. Ber.*, 1974, **107**, 3089, (*B-11 nmr, N-14 nmr, cmr*)
McFarlane, W. *et al.*, *Chem. Ber.*, 1975, **108**, 3831, (*pmr, B-11 nmr, cmr*)
Beck, W. *et al.*, *Chem. Ber.*, 1977, **105**, 2883, (*B-11 nmr, N-14 nmr*)
Nöth, H. *et al.*, *Chem. Ber.*, 1981, **114**, 1150, (*B-11 nmr, cmr*)
Davidson, G. *et al.*, *J.C.S. Dalton*, 1981, 306, (*ir, Raman*)
Schmid, G. *et al.*, *Z. Naturforsch., B*, 1982, **37**, 1230, (*low temp struct*)