



>>Entry Name: **Tris(1-methylpropyl)borane**, 12Cl, 9Cl

Synonym(s): Tri-*sec*-butyl borane, 8Cl. Tri-2-butylborane

CAS Registry Number: 1113-78-6

[H₃CCH₂CH(CH₃)]₃B

Molecular Formula: C₁₂H₂₇B

Molecular Weight: 182.156

Accurate Mass: 182.22058

Percentage Composition: C 79.13%; H 14.94%; B 5.94%

Source/Synthesis: Synth. by hydroboration of 2-butene

Use/Importance: Synthetic intermed., generally prepd. *in situ*, for transfer of *sec*-butyl group. Commercially available

Physical Description: Air-sensitive liq.

Boiling Point: Bp_{2.5} 60°

Solubility: Sol THF, other non-hydroxylic solvs.

Aldrich: 17896-9

References:

Hennion, G.F. *et al.*, *J.A.C.S.*, 1957, **79**, 5190, (*synth*)

McCusker, P.A. *et al.*, *J.O.C.*, 1963, **28**, 2889, (*synth, props*)

Wahab, M.A. *et al.*, *Rev. Roum. Phys.*, 1964, **9**, 599; *CA*, **62**, 12614d, (*spectra*)

Yamamoto, Y. *et al.*, *Chem. Lett.*, 1975, 1199, (*nmr*)

Suzuki, A. *et al.*, *Synthesis*, 1976, 687, (*synth, use*)

Reetz, M.T. *et al.*, *Angew. Chem., Int. Ed.*, 1977, **89**, 46, (*use*)

Takahashi, Y. *et al.*, *Chem. Lett.*, 1977, 999, (*synth*)

Compr. Org. Chem., (eds., Barton, D.H.R. *et al*), Pergamon, Oxford, 1979, **3**, 695, (*rev*)

Brown, H.C. *et al.*, *J. Organomet. Chem.*, 1980, **188**, 1, (*use*)

Brown, H.C. *et al.*, *Tetrahedron*, 1988, **44**, 2751, (*reactions*)