



>>Entry Name: Tris(1,2-dimethylpropyl)hydroborate(1-), 12Cl

Synonym(s): Triisoamylborohydride. Tris-*i*-amylhydroborate



Molecular Formula: C₁₅H₃₄B⁽⁻⁾

Molecular Weight: 225.245

Accurate Mass: 225.275355

Percentage Composition: C 79.99%; H 15.21%; B 4.80%

>>Derivative: Li salt

Synonym(s): Lithium triisoamylborohydride. LS-Selectride

CAS Registry Number: 60217-34-7

Molecular Formula: C₁₅H₃₄BLi

Molecular Weight: 232.186

Accurate Mass: 232.291358

Percentage Composition: C 77.60%; H 14.76%; B 4.66%; Li 2.99%

Use/Importance: Commercially available as THF soln. Highly stereoselective reducing agent

Physical Description: Air- and moisture-sensitive

Solubility: Sol. THF as THF complex

Aldrich: 22592-4

>>Derivative: Li salt, THF complex

CAS Registry Number: 68004-72-8

Molecular Formula: C₁₉H₄₂BLiO

Molecular Weight: 304.292

Percentage Composition: C 75.00%; H 13.91%; B 3.55%; Li 2.28%; O 5.26%

>>Derivative: K salt

Synonym(s): Potassium triisoamylborohydride. KS-Selectride

CAS Registry Number: 67966-25-0

Molecular Formula: C₁₅H₃₄BK

Molecular Weight: 264.343

Accurate Mass: 264.239062

Percentage Composition: C 68.16%; H 12.96%; B 4.09%; K 14.79%

Use/Importance: Commercially available as THF soln. Highly stereoselective reducing agent

Physical Description: Air- and moisture-sensitive

Solubility: Sol. THF

Aldrich: 22077-9

References:

Brown, C.A. *et al.*, *J. Organomet. Chem.*, 1978, **156**, 111, (*synth*)

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Dauben, W.G. *et al.*, *Tet. Lett.*, 1978, 4487, (*props*)

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Brown, C.A. *et al.*, *J.A.C.S.*, 1979, **101**, 3964

Brown, H.C. *et al.*, *J.O.C.*, 1979, **44**, 5004, (*ir, nmr*)

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