



>>Entry Name: Dibutyl[[[(trifluoromethyl)sulfonyl]oxy]borane, 10Cl
Synonym(s): Dibutylboryl trifluoromethanesulfonate. Dibutylboryl triflate

CAS Registry Number: 60669-69-4

Bu₂BOSO₂CF₃

Molecular Formula: C₉H₁₈BF₃O₃S

Molecular Weight: 274.112

Accurate Mass: 274.102179

Percentage Composition: C 39.44%; H 6.62%; B 3.94%; F 20.79%; O 17.51%; S 11.70%

Source/Synthesis: Synth. from Tributylborane [GGH05-P](#) + F₃CSO₃H

Use/Importance: Reagent for stereoselective aldol condensations. Borylating agent

Physical Description: Liq.

Boiling Point: Bp₂ 60°

Hazard & Toxicity: Care needed in synth. to avoid hazardous exotherm

Aldrich: 26147-5

Fluka: 34630

References:

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1979, **7**, 91; 1981, **9**, 140; 1990, **15**, 113

Inoue, T. *et al.*, *Bull. Chem. Soc. Jpn.*, 1980, **53**, 174, (*synth, ir, use*)

Evans, D.A. *et al.*, *J.A.C.S.*, 1981, **103**, 3099, (*synth, cmr, use*)

Chan, P.C.M. *et al.*, *Tetrahedron*, 1994, **50**, 2703, (*synth*)

Paterson, I. *et al.*, *Tetrahedron*, 1995, **51**, 9413, (*use*)