



>>Entry Name: Trimethyl(tributylstannyl)silane, 9Cl, 8Cl

Synonym(s): Tributyl(trimethylsilyl)stannane

CAS Registry Number: 17955-46-3

$(\text{H}_3\text{CCH}_2\text{CH}_2\text{CH}_2)_3\text{SnSiMe}_3$

Molecular Formula: $\text{C}_{15}\text{H}_{36}\text{SiSn}$

Molecular Weight: 363.245

Accurate Mass: 362.160827

Percentage Composition: C 49.60%; H 9.99%; Si 7.73%; Sn 32.68%

Source/Synthesis: Synth. from $\text{Bu}_3\text{SnLi} + \text{Me}_3\text{SiCl}$

Use/Importance: Undergoes 1,4-addn. to enones, catalysed by $\text{CN}^{(-)}$; also 1,4-silylstannation of 1,3-dienes in the presence of $\text{Pt}(\text{CO})_2(\text{PPh}_3)_2$. Couples with vinyl triflates and vinyl or aryl halides in the presence of catalytic Pd(0)

Physical Description: Liq.

Boiling Point: $\text{Bp}_{0.2} 88^\circ$

Refractive Index: $n_D^{20} 1.4873$

Aldrich: 36726-5

Fluka: 92781

Other: Gelest SNT8585

References:

Tamborski, C. *et al.*, *J.O.C.*, 1963, **28**, 237, (*synth, anal*)

Chenard, B.L. *et al.*, *Tet. Lett.*, 1986, **27**, 2805, (*use, addn to enones*)

Tsuji, Y. *et al.*, *J.A.C.S.*, 1991, **113**, 9369, (*use, silylstannation of dienes*)

Mori, M. *et al.*, *J.O.C.*, 1991, **56**, 3486, (*use, subst of vinyl triflates, halides, aryl halides*)