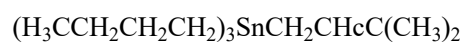




>>Entry Name: Tributyl(3-methyl-2-butenyl)stannane, 9CI

CAS Registry Number: 53911-92-5



Molecular Formula: C₁₇H₃₆Sn

Molecular Weight: 359.181

Accurate Mass: 358.1839

Percentage Composition: C 56.85%; H 10.10%; Sn 33.05%

Source/Synthesis: Synth. by alkylation of the approp. Grignard reagent with Bu₃SnCl using ultrasound

Use/Importance: Adds γ- to aldehydes in the presence of BF₃·Et₂O; couples with acyl halides in the presence of RuCl(PPh₃)₃ without allylic rearrangement; couples with allyl halides, acetates mostly at the γ-position in the presence of Pd complex catalysts, under CO atm. → ketones; couples with allyl palladium complexes in the presence of maleic anhydride

Physical Description: Liq.

Boiling Point: Bp₁ 114-116°

Solubility: Sol. CCl₄, Et₂O

References:

Hoffmann, R.W. *et al.*, *J. Organomet. Chem.*, 1980, **187**, 321, (*synth, anal, ir*)

Naruta, Y., *J.A.C.S.*, 1980, **102**, 3774, (*synth, pmr, ir*)

Godschalx, J. *et al.*, *Tet. Lett.*, 1980, 2599, (*use, subst of allyl bromides*)

Trost, B.M. *et al.*, *Tet. Lett.*, 1980, **21**, 2595, (*use, subst of allyl acetates*)

Beletskaya, I.P., *J. Organomet. Chem.*, 1983, **250**, 551, (*use, subst of allyl halides, acetates*)

Goliaszewski, A. *et al.*, *Organometallics*, 1985, **4**, 417, (*use, subst of allyl palladium complexes*)

Naruta, Y. *et al.*, *Chem. Lett.*, 1986, 1857, (*synth*)

Pereyre, M. *et al.*, *Tin in Organic Synthesis*, Butterworths, 1987, (*rev, uses*)