



>>Entry Name: Trimethyl(phenylethynyl)stannane, 10CI

Synonym(s): (Phenylethynyl)trimethylstannane. Phenyl(trimethylstannyl)acetylene

CAS Registry Number: 1199-95-7

$\text{Me}_3\text{SnC}\equiv\text{CPh}$

Molecular Formula: $\text{C}_{11}\text{H}_{14}\text{Sn}$

Molecular Weight: 264.942

Accurate Mass: 264.01175

Percentage Composition: C 49.87%; H 5.33%; Sn 44.81%

Source/Synthesis: Synth. from $\text{Me}_3\text{SnNMe}_2$ and $\text{PhC}\equiv\text{CH}$

Use/Importance: Couples with acyl, aryl, vinyl, allyl halides, allyl acetates in the presence of Pd complex catalysts; with ArX under CO $\rightarrow$ aryl ketones

Physical Description: Colourless liq.

Boiling Point: $\text{Bp}_{0.3}$ 68°

Refractive Index: n_D^{20} 1.5695

Aldrich: 42995-3

References:

Jones, K. *et al.*, *J. Organomet. Chem.*, 1965, **3**, 295, (synth)

Cullen, W.R. *et al.*, *Inorg. Chem.*, 1970, **9**, 1682, (Mössbauer)

Bird, S.R.A. *et al.*, *J.C.S.(A)*, 1971, 1311, (Mössbauer)

Bumagin, N.A. *et al.*, *Dokl. Akad. Nauk SSSR, Ser. Khim.*, 1982, **266**, 862-866; 1983, **272**, 1384-1388; *Dokl. Chem. (Engl. Transl.)*, 1982, **266**, 345-348; 1983, **272**, 333-336, (use, subst of aryl, vinyl halides, allyl acetates)

Bumagin, N.A., *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1983, **32**, 912-918; *Bull. Acad. Sci. USSR, Div. Chem. Sci. (Engl. Transl.)*, 1983, **32**, 828-833, (use, subst of allyl halides, acetates)

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

Labadie, J.W. *et al.*, *J.O.C.*, 1983, **48**, 4634, (use, subst of acyl halides)

Stille, J.K., *Angew. Chem., Int. Ed.*, 1986, **25**, 508, (use, subst of aryl halides)

Klyuchinskii, S.A. *et al.*, *Zh. Obshch. Khim.*, 1986, **56**, 1663, (reactions)