



>>Entry Name: Triphenyl-2-propenylstannane

Synonym(s): Allyltriphenylstannane

CAS Registry Number: 76-63-1

$\text{H}_2\text{C}=\text{CHCH}_2\text{SnPh}_3$

Molecular Formula: $\text{C}_{21}\text{H}_{20}\text{Sn}$

Molecular Weight: 391.099

Accurate Mass: 390.0587

Percentage Composition: C 64.49%; H 5.15%; Sn 30.35%

Source/Synthesis: Synth. from Ph_3SnCl and $\text{H}_2\text{C}=\text{CHCH}_2\text{MgBr}$

Use/Importance: Commercially available. Allylates α -methylthioaldehydes, when catalysed by SnCl_4 gives high *anti*-selectivity; reaction with α -benzyloxyaldehydes is v. *syn*-selective; undergoes reasonably stereoselective addn. to β -alkoxyaldehydes in the presence of Lewis acid catalysts

Physical Description: Needle-like cryst. (EtOH)

Melting Point: Mp 73-74.5°

Solubility: Sol. most org. solvs.

Aldrich: 33236-4

Fluka: 6085

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 748C, (*nmr*)

Gilman, H. *et al.*, *J.O.C.*, 1955, **20**, 763, (*synth*)

Ganis, P. *et al.*, *J. Organomet. Chem.*, 1985, **293**, 207, (*cryst struct*)

Shimagaki, M. *et al.*, *Tet. Lett.*, 1985, **26**, 6235, (*use, addn to aldehydes*)

Keck, G.E. *et al.*, *J.A.C.S.*, 1986, **108**, 3847, (*use, addn to aldehydes*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, AGU500