



>>Entry Name: Triphenyl-2-propenylsilane, 9Cl

Synonym(s): Allyltriphenylsilane, 8Cl. 3-Triphenylsilylpropene

CAS Registry Number: 18752-21-1

$\text{Ph}_3\text{SiCH}_2\text{CH}=\text{CH}_2$

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

Molecular Weight: 300.474

Accurate Mass: 300.133427

Percentage Composition: C 83.94%; H 6.71%; Si 9.35%

Source/Synthesis: Synth. from Ph_3SiCl and $\text{H}_2\text{C}=\text{CHCH}_2\text{MgCl}$

Use/Importance: Comly. available. Metallation and reaction with $\text{Ti}(\text{OPr}^i)_4 \rightarrow$ 'ate' complex $\text{Ph}_3\text{SiCH}=\text{CHCH}_2\text{Ti}^{(i)}(\text{OPr}^i)_4$ which adds γ - to aldehydes $\rightarrow$ β -silyl alcohols, which convert to (*Z*)- or (*E*)-dienes in acid or base

Physical Description: Cryst. (EtOH)

Melting Point: Mp 91-92° (88-90°)

Aldrich: 37585-3

Fluka: 6080

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 703C, (*nmr*)

Fischer, E. *et al.*, *J. Prakt. Chem.*, 1963, **21**, 149, (*synth*)

Corriu, R.J. *et al.*, *J. Organomet. Chem.*, 1973, **55**, 73, (*synth*)

Eisch, J.J. *et al.*, *J. Organomet. Chem.*, 1979, **168**, 139, (*synth*)

Ikeda, Y. *et al.*, *Bull. Chem. Soc. Jpn.*, 1986, **59**, 657, (*use*)

Cai, J. *et al.*, *J.C.S. Perkin 2*, 1992, 1743, (*synth*, *pmr*)