



>>Entry Name: Dimethylphenylsilane, 9CI

CAS Registry Number: 766-77-8

Type of Compound Code(s): BA0360 BB0260 BB0390 BA0407 BB0400 BB0070 BA0500 BA0502 BB0010
PhSiMe₂H

Molecular Formula: C₈H₁₂Si

Molecular Weight: 136.268

Accurate Mass: 136.070827

Percentage Composition: C 70.51%; H 8.88%; Si 20.61%

Source/Synthesis: Synth. from PhSiMe₂Cl + LiAlH₄

Use/Importance: Hydrosilylates alkenes in the presence of Rh complex catalysts and undergoes Pd or Rh complex catalysed 1,4-hydrosilylation of dienes; reagent for silacarboyclisation of enynes in the presence of Rh complex catalysts; adds 1,4- to enones in the presence of Rh^I; hydrosilylates ketones; diastereoselectively reduces aldehydes, ketones in the presence of catalytic [Bu₄N]F; diastereoselectively reduces α-methyl-β-ketoamides to *anti*-alcohols with tris(diethylamino)sulfonium difluorotrimethyl silicate in DMPU; in F₃CCOOH *syn*-alcohol obt.; in F₃CCOOH reduces protected oximes → subst. hydroxylamines

Physical Description: Liq.

Boiling Point: Bp₇₄₄ 157°

Refractive Index: n_D²⁰ 1.4995

Aldrich: 23501-6

Fluka: 41418

References:

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