



>>Entry Name: Trimethyl(phenylethynyl)silane, 9Cl, 8Cl

Synonym(s): (Phenylethynyl)trimethylsilane. Phenyl(trimethylsilyl)ethyne

CAS Registry Number: 2170-06-1

$\text{PhC}\equiv\text{CSiMe}_3$

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

Molecular Weight: 174.317

Accurate Mass: 174.086477

Percentage Composition: C 75.79%; H 8.09%; Si 16.11%

Source/Synthesis: Synth. from phenylethyne, BuLi, and Me_3SiCl in THF

Use/Importance: Commercially available. Precursor to α -keto esters, α -ketoacyl silanes and *cis*-vinylsilanes (via hydroboration)

Physical Description: Colourless oil

Boiling Point: Bp₉ 87-88°. Bp₁ 59-60°

Refractive Index: n_D^{20} 1.5280

Aldrich: 33892-3

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 720C, (*nmr*)

Oliver, R. *et al.*, *Tet. Lett.*, 1972, 5209, (*synth*)

Miller, R.B. *et al.*, *J.O.C.*, 1978, **43**, 4424, (*synth*)

Nakamura, E. *et al.*, *Bull. Chem. Soc. Jpn.*, 1981, **54**, 805, (*synth*)

Tamiguchi, Y. *et al.*, *Bull. Chem. Soc. Jpn.*, 1981, **54**, 3229, (*synth*)

Bulman Page, P.C. *et al.*, *Tetrahedron*, 1990, **46**, 2573, (*synth, ir, pmr, use*)

Kataoka, Y. *et al.*, *Tet. Lett.*, 1990, **31**, 365, (*use*)

Soderquist, J.A. *et al.*, *Tet. Lett.*, 1990, **31**, 5113; 1991, **32**, 44, (*use\I4*)