



>>Entry Name: Trimethyl[(phenylsulfonyl)methyl]silane, 11Cl

Synonym(s): (Phenylsulfonyl)trimethylsilylmethane. Phenyl trimethylsilylmethyl sulfone

CAS Registry Number: 17872-92-3

$\text{Me}_3\text{SiCH}_2\text{SO}_2\text{Ph}$

Molecular Formula: $\text{C}_{10}\text{H}_{16}\text{O}_2\text{SSi}$

Molecular Weight: 228.387

Accurate Mass: 228.064027

Percentage Composition: C 52.59%; H 7.06%; O 14.01%; S 14.04%; Si 12.30%

Source/Synthesis: Synth. by H_2O_2 oxidn. of $\text{Me}_3\text{SiCH}_2\text{SPh}$

Use/Importance: Commercially available. Reagent for conversion of aldehydes and ketones to corresp. vinyl sulfones via modified Peterson olefination. Lithiated to the dilithio compd. [Dilithio(phenylsulfonyl)methyl]trimethylsilane [FKD46-Z](#)

Physical Description: Liq. or solid with strong odour

Melting Point: Mp 28-30°

Boiling Point: Bp₆ 160°. Bp_{0.01} 121°

Refractive Index: n_D^{20} 1.5250

Aldrich: 30674-6

Fluka: 79276

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 711B, (*nmr*)

Cooper, G.D., *J.A.C.S.*, 1954, **76**, 3713, (*synth*)

Peterson, D.J., *J.O.C.*, 1968, **33**, 780, (*use*)

Ley, S.V. *et al.*, *Chem. Comm.*, 1983, 1281, (*use*)

Vollhardt, J. *et al.*, *Angew. Chem., Int. Ed.*, 1985, **24**, 696, (*props*)

Craig, D. *et al.*, *J.C.S. Perkin I*, 1985, 1949, (*use*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1986, **12**, 393, (*use*)