



>>Entry Name: **MOI**, 9Cl

Synonym(s): Dimethylphenylsilyl chloride

CAS Registry Number: 768-33-2

PhMe₂SiCl

Molecular Formula: C₈H₁₁ClSi

Molecular Weight: 170.713

Accurate Mass: 170.031854

Percentage Composition: C 56.29%; H 6.49%; Cl 20.77%; Si 16.45%

Source/Synthesis: Synth. from PhMgBr + Me₂SiCl₂

Use/Importance: Commercially available derivatisation reagent in hplc of carbohydrates. Reagent for nucleophilic silylation

Physical Description: Moisture-sensitive liq.

Boiling Point: Bp 194-197°

Density: d₄²⁰ 1.03

Refractive Index: n_D²⁰ 1.5090

Other Data: Reacts with H₂O violently to give HCl

Aldrich: 11337-9

Fluka: 78390

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1121A, (*ir*)

Aldrich Library of ¹³C and ¹H FT NMR Spectra, 1992, **3**, 704C, (*nmr*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1665D, (*ir*)

Grenoble, M.E. *et al.*, *Appl. Spectrosc.*, 1960, **14**, 85, (*ir, synth, Raman*)

Kriegsmann, H. *et al.*, *Z. Anorg. Allg. Chem.*, 1961, **310**, 320, (*synth, ir, Raman*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, **2**, 278, (*use*)

Chuy, N.D. *et al.*, *Coll. Czech. Chem. Comm.*, 1975, **40**, 875, (*pmr, cmr, Si-29 nmr*)

White, C.A. *et al.*, *Carbohydr. Res.*, 1983, **119**, 241, (*use*)

White, C.A. *et al.*, *J. Chromatogr.*, 1983, **264**, 99, (*use*)

Encyclopaedia of Reagents for Organic Synthesis, (ed. Paquette, L.A.), Wiley, 1995, **2**, 1120-1121, (*rev, use*)

Synthetic Methods of Organometallic and Inorganic Chemistry, (ed. Hermann, W.A.), Thieme, 1996, **2**, 163-165, (*synth*)