



>>Entry Name: Trimethylsilyl chlorosulfonate

Synonym(s): Chlorosulfuric acid trimethylsilyl ester, 9Cl, 8Cl

CAS Registry Number: 4353-77-9

ClSO₃SiMe₃

Molecular Formula: C₃H₉ClO₃SSi

Molecular Weight: 188.707

Accurate Mass: 187.973019

Percentage Composition: C 19.09%; H 4.81%; Cl 18.79%; O 25.44%; S 16.99%; Si 14.88%

Source/Synthesis: Synth. from Me₃SiCl + H₂SO₄ in C₆H₆, then PCl₅

Use/Importance: Versatile sulfonation reagent

Physical Description: Moisture-sensitive liq.

Boiling Point: Bp₁₀ 62-64°

Aldrich: 35974-2

Fluka: 26393

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 698C, (nmr)

Schmidt, M. *et al.*, *Chem. Ber.*, 1962, **95**, 47, (synth)

Duffaut, N. *et al.*, *Bull. Soc. Chim. Fr.*, 1963, 512, (synth, reactions)

Grignon-Dubois, M. *et al.*, *J. Organomet. Chem.*, 1977, **124**, 135, (use)