



>>Entry Name: Trimethylsilyl methanesulfonate, 9CI

Synonym(s): Methanesulfonic acid trimethylsilyl ester. Trimethyl(methanesulfonyloxy)silane

CAS Registry Number: 10090-05-8

$\text{Me}_3\text{SiOSO}_2\text{Me}$

Molecular Formula: $\text{C}_4\text{H}_{12}\text{O}_3\text{SSi}$

Molecular Weight: 168.289

Accurate Mass: 168.027642

Percentage Composition: C 28.55%; H 7.19%; O 28.52%; S 19.05%; Si 16.69%

Source/Synthesis: Synth. from Me_3SiCl + MeOSO_2H

Use/Importance: Commercially available

Physical Description: Moisture-sensitive liq.

Melting Point: Mp -21°

Boiling Point: Bp₂₅ 103-104°. Bp₁₃ 88.5-90°

Density: d_4^{20} 1.1

Refractive Index: n_D^{20} 1.4235

Aldrich: 37614-0

Fluka: 64296

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 697B, (nmr)

Schmidbaur, H. *et al.*, *J. Organomet. Chem.*, 1968, **15**, 77, (synth, pmr)

Biro, M. *et al.*, *Bull. Soc. Chim. Fr.*, 1978, 442, (synth)