



>>Entry Name: Hexamethyldisilathiane, 9Cl

Synonym(s): Hexamethyldisilthiane, 8Cl. Thiobis[trimethylsilane]. Bis(trimethylsilyl) sulfide

CAS Registry Number: 3385-94-2

$\text{Me}_3\text{SiSSiMe}_3$

Molecular Formula: $\text{C}_6\text{H}_{18}\text{SSi}_2$

Molecular Weight: 178.445

Accurate Mass: 178.066774

Percentage Composition: C 40.39%; H 10.17%; S 17.97%; Si 31.48%

Source/Synthesis: Synth. from $(\text{Me}_3\text{Si})_2\text{NH} + \text{H}_2\text{S}$

Use/Importance: Reagent for transfer of sulfur to carbon; in presence of Li (5-10% BuLi), converts aldehydes $\rightarrow$ thioaldehydes. Reducing agent for sulfoxidesr sulfides

Physical Description: V. hygroscopic liq.

Boiling Point: Bp 163°. Bp₁₆ 65-67°

Hazard & Toxicity: V. poisonous. Flammable, fl. p. 26°. Irritant

Aldrich: 28313-4

Fluka: 52643

References:

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1652C, (ir)

Abel, E.W. *et al.*, *J.C.S.*, 1964, 2455, (synth)

Schaefer, T. *et al.*, *Can. J. Chem.*, 1967, **45**, 3143, (pmr)

Markovskii, L.N. *et al.*, *Zh. Org. Khim.*, 1972, **8**, 1822, (synth)

Harpp, D.N. *et al.*, *Synthesis*, 1976, 721, (use)

Soysa, H.S.D. *et al.*, *Tet. Lett.*, 1978, 235, (use, redn of sulfoxides)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 240, (use)

Segi, M. *et al.*, *J.A.C.S.*, 1988, **110**, 1976, (use, reaction with aldehydes)

Capozzi, G. *et al.*, *Gazz. Chim. Ital.*, 1990, **120**, 421, (use)