



>>Entry Name: Tris(trimethylsilyl)methane

Synonym(s): Methylidyne tris(trimethylsilane), 9Cl. 2,2,4,4-Tetramethyl-3-(trimethylsilyl)-2,4-disilapentane, 8Cl

CAS Registry Number: 1068-69-5

$(\text{Me}_3\text{Si})_3\text{CH}$

Molecular Formula: $\text{C}_{10}\text{H}_{28}\text{Si}_3$

Molecular Weight: 232.588

Accurate Mass: 232.149881

Percentage Composition: C 51.64%; H 12.13%; Si 36.23%

Source/Synthesis: Synth. from CHCl_3 , Me_3SiCl and Mg in THF

Use/Importance: Commercially available. Used as a ligand, normally attached to metals and metalloids, in org. synth. Anion reacts with ketones $\rightarrow$ alkenes

Physical Description: Liq.

Boiling Point: Bp 219° . Bp_{13.5} $93-95^\circ$. Bp₂ 80°

Density: d_4^{20} 0.836083

Refractive Index: n_D^{20} 1.4657

Aldrich: 30260-0

Fluka: 93399

References:

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1627A, (ir)

Müller, R. *et al.*, *Chem. Ber.*, 1958, **91**, 22, (synth)

Merker, R.L. *et al.*, *J. Organomet. Chem.*, 1965, **4**, 98, (synth, pmr)

Weber, W.P. *et al.*, *J. Chem. Phys.*, 1970, **74**, 3960, (ir, pmr)

Dimmel, D.R. *et al.*, *J.O.C.*, 1972, **37**, 2662; 2665, (ir, pmr, ms)

Sakurai, H. *et al.*, *Tet. Lett.*, 1973, 4193, (use)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1975, **5**, 618, (use)

Wrackmeyer, B. *et al.*, *Z. Naturforsch., B*, 1979, **34**, 1270, (cmr)

Beagley, B. *et al.*, *Chem. Comm.*, 1981, 710, (struct)

Aiube, Z.H. *et al.*, *J. Organomet. Chem.*, 1984, **269**, 217, (use)