



>>Entry Name: Acetyltrimethylsilane, 12Cl, 9Cl

ENTRY UNDER REVIEW

Synonym(s): Methyl trimethylsilyl ketone

CAS Registry Number: 13411-48-8

Me₃SiCOMe

Molecular Formula: C₅H₁₂OSi

Molecular Weight: 116.235

Accurate Mass: 116.065742

Percentage Composition: C 51.67%; H 10.41%; O 13.76%; Si 24.16%

Source/Synthesis: Synth. from H₂C=C(OEt)Li + Me₃SiCl, then hydrol.

Use/Importance: Commercially available. Used as hindered acetaldehyde equiv. in stereo-controlled aldol reactions for antibiotic synth.

Physical Description: Moisture-sensitive liq.

Boiling Point: Bp₇₅₁ 113-114°

Refractive Index: n_D²⁰ 1.4113

Aldrich: 36282-4

Fluka: 1515

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 682A, (nmr)

Brook, A.G. *et al.*, *J.A.C.S.*, 1967, **89**, 431, (synth)

Corey, E.J. *et al.*, *J.A.C.S.*, 1967, **89**, 434, (synth, ir, ms, pmr, uv)

Bourgeois, P. *et al.*, *J. Organomet. Chem.*, 1974, **80**, C25, (synth, ir, pmr)

Dexheimer, E.M. *et al.*, *J. Organomet. Chem.*, 1976, **107**, 229, (synth, ir, cmr)

Bouffard, F.A. *et al.*, *Tet. Lett.*, 1985, **26**, 6285, (use)

Larson, G.L. *et al.*, *Synth. Commun.*, 1990, **20**, 1095, (use)

Soderquist, J.A. *et al.*, *Tet. Lett.*, 1990, **31**, 4677, (use)