



>>Entry Name: Tris(trimethylsilyloxy)ethylene

Synonym(s): [1-Ethenyl-2-ylidenetris(oxy)]tris[trimethylsilane], 9Cl

CAS Registry Number: 69097-20-7

$\text{Me}_3\text{SiOCH}=\text{C}(\text{OSiMe}_3)_2$

Molecular Formula: $\text{C}_{11}\text{H}_{28}\text{O}_3\text{Si}_3$

Molecular Weight: 292.597

Accurate Mass: 292.134626

Percentage Composition: C 45.15%; H 9.65%; O 16.40%; Si 28.80%

Source/Synthesis: Synth. from $\text{Me}_3\text{SiCH}_2\text{COOSiMe}_3$ and lithium hexamethyldisilazide, then Me_3SiCl

Use/Importance: Commercially available reagent for conversion of acid chlorides to hydroxymethyl ketones and for synth. of 2,3-dihydroxyalkanoic acids from aldehydes

Physical Description: Moisture-sensitive liq.

Boiling Point: Bp_{11} 90°. $\text{Bp}_{0.1}$ 54-56°

Refractive Index: n_D^{20} 1.4200

Aldrich: 23514-8

Fluka: 93400

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1108B, (*ir*)

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 667A, (*nmr*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1646B, (*ir*)

Wissner, A., *Tet. Lett.*, 1978, 2749-2752, (*synth, pmr, use*)

Wissner, A., *J.O.C.*, 1979, **44**, 4617-4622, (*synth, use*)

Wissner, A., *Synthesis*, 1979, 27-28, (*use*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 523; 1981, **9**, 512, (*use*)

Compr. Organomet. Chem., Pergamon, 1982, **7**, 572, (*rev*)

Oesterle, T. *et al.*, *Annalen*, 1987, 687-692, (*synth, pmr*)