



>>Entry Name: Ethenyldiethoxymethylsilane, 9CI

Synonym(s): Diethoxymethylvinylsilane

CAS Registry Number: 5507-44-8

$\text{H}_2\text{C}=\text{CHSiMe}(\text{OEt})_2$

Molecular Formula: $\text{C}_7\text{H}_{16}\text{O}_2\text{Si}$

Molecular Weight: 160.288

Accurate Mass: 160.091957

Percentage Composition: C 52.45%; H 10.06%; O 19.96%; Si 17.52%

Source/Synthesis: Synth. from $\text{H}_2\text{C}=\text{CHSiMeCl}_2$ and EtOH

Use/Importance: Coupling agent for filled composites

Physical Description: Liq.

Boiling Point: Bp_{743} 132.5-133°

Density: d_4^{20} 0.862

Refractive Index: n_D^{20} 1.3998

Other Data: Undergoes radical homopolym.

Aldrich: 25946-2

Fluka: 69678

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 663C, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1094D, (ir)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1643D, (ir)

Cohen, M. *et al.*, *J.A.C.S.*, 1953, **75**, 988, (synth)

Knizek, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1963, **28**, 3079, (ir, Raman)

Schraml, J. *et al.*, *Coll. Czech. Chem. Comm.*, 1966, **31**, 503, (pmr)

Rakita, P.E. *et al.*, *J. Organomet. Chem.*, 1977, **139**, 135, (cmr)

Andrianov, K.A. *et al.*, *Vysokomol. Soedin., Ser. A*, 1977, **19**, 749; *CA*, **86**, 171946t, (polym)

Kulkarni, R.D. *et al.*, *CA*, 1981, **93**, 221356, (use)

Leipins, E. *et al.*, *J. Organomet. Chem.*, 1986, **306**, 167, (cmr, O-17 nmr, Si-29 nmr)

Lavrukhin, B.D. *et al.*, *Vysokomol. Soedin., Ser. A*, 1986, **28**, 272; *CA*, **104**, 225487e, (polym)