



>>Entry Name: Triisopropylsilane

Synonym(s): Tris(1-methylethyl)silane, 9CI

CAS Registry Number: 6485-79-6

$(\text{Me}_2\text{CH})_3\text{SiH}$

Molecular Formula: $\text{C}_9\text{H}_{22}\text{Si}$

Molecular Weight: 158.358

Accurate Mass: 158.149077

Percentage Composition: C 68.26%; H 14.00%; Si 17.74%

Source/Synthesis: Synth. from $\text{Pr}^i\text{MgCl} + \text{HSiCl}_3$

Use/Importance: Hydrosilylation reagent, e.g. for alkynes in presence of Pt, Rh or Pd catalysts

Physical Description: Liq.

Boiling Point: Bp_{50} 83.5°

Density: d_4^{20} 0.77

Refractive Index: n_D^{20} 1.4352

Aldrich: 23378-1

Fluka: 92095

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **3**, 630B, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1098D, (ir)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1622D, (ir)

Gilman, H. *et al.*, *J.A.C.S.*, 1947, **69**, 1499, (synth)

Mares, F. *et al.*, *J. Organomet. Chem.*, 1966, **6**, 327, (synth)

Newton, W.E. *et al.*, *Inorg. Chim. Acta*, 1970, **4**, 133, (pmr)

Lacout-Loustalet, M.B. *et al.*, *J. Organomet. Chem.*, 1971, **31**, 187, (ir)

Engelhardt, G. *et al.*, *Org. Magn. Reson.*, 1973, **5**, 561, (Si-29 nmr)

Weidenbruch, M. *et al.*, *J. Organomet. Chem.*, 1975, **90**, 145, (synth)

Kuncora, G. *et al.*, *Coll. Czech. Chem. Comm.*, 1980, **45**, 2085, (use)

Beltram, G. *et al.*, *J. Electron Spectrosc. Relat. Phenom.*, 1980, **18**, 153, (pe, uv)

Kusumoto, T. *et al.*, *Chem. Lett.*, 1985, 1405, (use, hydrosilylation of alkynes)