



>>Entry Name: Tetrabutyl silicate

Synonym(s): Silicic acid tetrabutyl ester, 9CI. Butyl silicate. Tetrabutoxysilane. Tetrabutyl orthosilicate

CAS Registry Number: 4766-57-8

Si(OCH2CH2CH2CH3)4

Molecular Formula: C₁₆H₃₆O₄Si

Molecular Weight: 320.543

Accurate Mass: 320.238287

Percentage Composition: C 59.95%; H 11.32%; O 19.97%; Si 8.76%

Source/Synthesis: Synth. from BuOH and SiCl₄

Use/Importance: Commercially available

Physical Description: Oil

Boiling Point: Bp 275°. Bp₇₅₂ 268°. Bp_{0.5} 106-108°

Density: d²⁰ 0.9

Refractive Index: n_D²⁰ 1.4130

Aldrich: T570-2

Fluka: 86914

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 669A, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1093C, (ir)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1648B, (ir)

Gerrard, W. *et al.*, *J.C.S.*, 1951, 519, (synth)

Bradley, D.C. *et al.*, *J.C.S.*, 1953, 2025, (synth)

Wurst, M. *et al.*, *Coll. Czech. Chem. Comm.*, 1971, **36**, 3497, (glc)