



>>Entry Name: Silicon(IV) acetate

Synonym(s): Tetraacetoxysilane. Silicon tetraacetate. Acetic acid tetraanhydride with silicic acid (H_4SiO_4), 9CI

CAS Registry Number: 562-90-3

$\text{Si}(\text{OAc})_4$

Molecular Formula: $\text{C}_8\text{H}_{12}\text{O}_8\text{Si}$

Molecular Weight: 264.263

Accurate Mass: 264.030147

Percentage Composition: C 36.36%; H 4.58%; O 48.43%; Si 10.63%

Source/Synthesis: Synth. from $\text{SiCl}_4 + \text{Ac}_2\text{O}$ or NaOAc

Physical Description: Hygroscopic cryst. (Ac_2O)

Melting Point: Mp 110°

Boiling Point: Bp₅ 148°

Solubility: Mod. sol. Me_2CO , C_6H_6

Aldrich: 34515-6

Fluka: 85369

Rare Chemicals Library: S56533-4

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **1**, 849B, (nmr)

Inorg. Synth., 1953, **4**, 45, (synth)

Udovenko, V.V. *et al.*, *J. Gen. Chem. USSR (Engl. Transl.)*, 1957, **27**, 985, (synth)

Hunter, B.K. *et al.*, *Can. J. Chem.*, 1968, **46**, 1399, (Si-29 nmr)

Kamenar, B. *et al.*, *Z. Kristallogr., Kristallgeom., Kristallphys., Kristallchem.*, 1975, **141**, 97, (cryst struct)

Dube, G. *et al.*, *Coll. Czech. Chem. Comm.*, 1977, **42**, 2898, (ms)

Straughan, B.P. *et al.*, *Spectrochim. Acta A*, 1986, **42**, 451, (ir, Raman, struct)