



>>Entry Name: Diphenylsilanediol, 9CI

Synonym(s): Dihydroxydiphenylsilane

CAS Registry Number: 947-42-2

$\text{Ph}_2\text{Si}(\text{OH})_2$

Molecular Formula: $\text{C}_{12}\text{H}_{12}\text{O}_2\text{Si}$

Molecular Weight: 216.311

Accurate Mass: 216.060657

Percentage Composition: C 66.63%; H 5.59%; O 14.79%; Si 12.98%

Source/Synthesis: Synth. by hydrol. of Ph_2SiCl_2

Use/Importance: Comly. available. Monomer for polysiloxanes and other polymers

Physical Description: Moisture-sensitive cryst. (C_6H_6)

Melting Point: Mp 140-141 dec.°

Other Data: Loses H_2O at 140°

Hazard & Toxicity: LD_{50} (mus, orl) 2150 mg/kg

Aldrich: D21370-5

Fluka: 43300

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1125B, (ir)

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Hampton, J.F. *et al.*, *Inorg. Chem.*, 1965, **4**, 1659, (pmr)

Petrashko, A.I. *et al.*, *Dokl. Akad. Nauk SSSR*, 1968, **180**, 1116; *Dokl. Chem. (Engl. Transl.)*, 1968, **180**, 542, (polym)

Harris, G.I., *J.C.S.(B)*, 1971, 2083, (synth, ir)

Morsmann, H.C., *Chem.-Ztg.*, 1972, **96**, 288, (pmr)

Ho, B.Y.K. *et al.*, *Org. Mass Spectrom.*, 1975, **10**, 361, (ms)

Fawcett, J.K. *et al.*, *Can. J. Chem.*, 1977, **55**, 20, (cryst struct)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DMN 450