



>>Entry Name: Dibutyldimethoxystannane, 9CI

Synonym(s): Dibutyltin dimethoxide

CAS Registry Number: 1067-55-6

$(\text{H}_3\text{CCH}_2\text{CH}_2\text{CH}_2)_2\text{Sn}(\text{OMe})_2$

Molecular Formula: $\text{C}_{10}\text{H}_{24}\text{O}_2\text{Sn}$

Molecular Weight: 295.008

Accurate Mass: 294.07983

Percentage Composition: C 40.71%; H 8.20%; O 10.85%; Sn 40.24%

Source/Synthesis: Synth. from Bu_2SnCl_2 and NaOMe in MeOH

Use/Importance: Catalyst for polym. reactions and orthocarbonate formn.; reacts with ethene carbonate→dimethyl carbonate

Physical Description: Air-sensitive liq.

Boiling Point: $\text{Bp}_{0.6}$ 131-132°

Refractive Index: n_{D}^{20} 1.4854

Hazard & Toxicity: Fl. p. 110°

Aldrich: D4980-6

Other: Gelest SND3280

References:

- Aldrich Library of ^{13}C and ^1H FT NMR Spectra*, 1992, **3**, 742B, (*nmr*)
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Alleston, D.L. *et al.*, *J.C.S.*, 1962, 2050, (*synth*)
Davies, A.G. *et al.*, *J.C.S.(C)*, 1967, 1313, (*props*)
Maire, J.C. *et al.*, *Helv. Chim. Acta*, 1968, **51**, 1150, (*synth, ir*)
Smith, P.J., *Organomet. Chem. Rev., Sect. A*, 1970, **5**, 373, (*Mössbauer*)
Smith, P.J. *et al.*, *J. Organomet. Chem.*, 1972, **40**, 341, (*nmr*)
Mitchell, T.N., *J. Organomet. Chem.*, 1973, **59**, 189, (*cmr*)
Marchand, A. *et al.*, *J. Organomet. Chem.*, 1974, **74**, 227, (*ir*)
Sakai, S. *et al.*, *Chem. Comm.*, 1975, 265, (*use*)