



>>Entry Name: Diacetoxydi-*tert*-butoxysilane

Synonym(s): Acetic acid dianhydride with silicic acid (H₄SiO₄) bis(*tert*-butyl) ester, 10CI

CAS Registry Number: 13170-23-5

[(H₃C)₃CO]₂Si(OAc)₂

Molecular Formula: C₁₂H₂₄O₆Si

Molecular Weight: 292.404

Accurate Mass: 292.134217

Percentage Composition: C 49.29%; H 8.27%; O 32.83%; Si 9.61%

Source/Synthesis: Synth. from Si(OAc)₄ + Bu^tOH

Use/Importance: Used in CVD of silica coatings

Physical Description: Liq.

Boiling Point: Bp₅ 102.3-102.5°

Density: d²⁰ 1.02

Refractive Index: n_D²⁰ 1.4040

References:

Dolgov, B.N. *et al.*, *Zh. Obshch. Khim.*, 1957, **27**, 921-926; *CA*, **52**, 3673i, (*synth*)

Haanappel, V.A.C. *et al.*, *Mater. Sci. Eng., A*, 1993, **167**, 179-185, (*SiO₂ films*)

Hofman, R. *et al.*, *Thermochim. Acta*, 1993, **215**, 329-335, (*pyrolysis*)