



>>Entry Name: Tin(II) oxide (SnO), 9CI

Synonym(s): Stannous oxide. Tin monoxide

CAS Registry Number: 21651-19-4

SnO

Molecular Formula: OSn

Molecular Weight: 134.709

Accurate Mass: 133.897115

Percentage Composition: O 11.88%; Sn 88.12%

Source/Synthesis: Synth. by hydrol. of SnCl₂ to hydrated Sn(II) oxide and subsequent dehydration

Physical Description: Blue-black cryst. In air, oxidises to SnO₂ above 220°. Also exists in a red orthorhombic modification (metastable)

Solubility: Insol. H₂O, MeOH

Aldrich: 24464-3

Other: Gelest SNT7968

References:

Fink, C.G. *et al.*, *J. Phys. Chem.*, 1928, **32**, 103, (*props*)

Straumanis, M. *et al.*, *Z. Anorg. Allg. Chem.*, 1933, **213**, 301, (*synth*)

Donaldson, J.D. *et al.*, *J.C.S.*, 1961, 839, (*synth, cryst struct, red-form*)

Kwestroo, W. *et al.*, *J. Inorg. Nucl. Chem.*, 1967, **29**, 2187, (*synth*)

Davies, C.G. *et al.*, *J.C.S.(A)*, 1968, 946, (*Mössbauer*)

Bos, A. *et al.*, *J.C.S. Faraday 2*, 1974, **70**, 440, (*Mössbauer*)

Pannetier, J. *et al.*, *Acta Cryst. B*, 1980, **36**, 2763, (*cryst struct*)

Maki, A.G. *et al.*, *J. Mol. Spectrosc.*, 1983, **98**, 146, (*ir*)