



>>Entry Name: Tin(IV) iodide (SnI₄)

Synonym(s): Tin tetraiodide. Tetraiodostannane, 9Cl. Stannic iodide

CAS Registry Number: 7790-47-8

SnI₄

Molecular Formula: I₄Sn

Molecular Weight: 626.328

Accurate Mass: 625.520092

Percentage Composition: I 81.05%; Sn 18.95%

Source/Synthesis: Synth. by direct iodination of tin

Physical Description: Red cubic cryst. Hydrol. completely in H₂O

Melting Point: Mp 144°

Boiling Point: Bp 364°

Solubility: Sol. CCl₄, CHCl₃, C₆H₆, CS₂, EtOH, Et₂O

Other Data: d₄²⁰ 4.56

Aldrich: 40929-4

Fluka: 96537

References:

Inorg. Synth., 1953, **4**, 119, (*synth*)

Meller, F. *et al.*, *Acta Cryst.*, 1955, **8**, 343, (*cryst struct*)

Druce, P.M. *et al.*, *J.C.S.(A)*, 1971, 3395, (*synth*)

Wheatland, D.A., *J. Chem. Educ.*, 1973, **50**, 854, (*synth*)

Matsumoto, K. *et al.*, *Talanta*, 1975, **22**, 695, (*ms*)

Andrews, S.P. *et al.*, *J. Chem. Res., Synop.*, 1978, 94, (*ir, Raman*)

Jones, C.H.W. *et al.*, *Can. J. Chem.*, 1981, **59**, 1585, (*Mössbauer*)

Colto, R. *et al.*, *Inorg. Chim. Acta*, 1982, **61**, 1, (*Sn-119 nmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TGD750