



>>Entry Name: Dipotassium stannate(IV)

Synonym(s): Potassium metastannate. Potassium tin oxide (K_2SnO_3). Potassium stannate (K_2SnO_3)

CAS Registry Number: 12142-33-5

K_2SnO_3

Molecular Formula: $\text{K}_2\text{O}_3\text{Sn}$

Molecular Weight: 244.905

Accurate Mass: 243.814359

Percentage Composition: K 31.93%; O 19.60%; Sn 48.47%

General Statement: Struct. contains chains of base edge shared SnO_5 square pyramids

Source/Synthesis: Phase in the SnO_2 - K_2O system

Physical Description: Hygroscopic, colourless needles

Solubility: Sol. H_2O ; insol. EtOH, Et_2O

Other Data: Hydrated salt loses H_2O at 140° . Dec. $>140^\circ$

References:

Tournoux, M. *et al.*, *C. R. Hebd. Seances Acad. Sci.*, 1963, **257**, 907, (*synth*)

Tournoux, M. *et al.*, *Ann. Chim. (Paris)*, Ser. 13, 1964, **9**, 579, (*synth*)

Hoppe, R. *et al.*, *Naturwissenschaften*, 1964, **51**, 86, (*synth*)

Gatehouse, B.M. *et al.*, *Chem. Comm.*, 1969, 727, (*cryst struct*)

Delmas, C. *et al.*, *J. Solid State Chem.*, 1976, **19**, 87, (*struct*)

U.S. Pat., 1981, 4 291 009; *CA*, **95**, 206258, (*manuf*)

Clayden, N.J. *et al.*, *J.C.S. Dalton*, 1989, 843, (*Sn-119 nmr*)