



>>Entry Name: Tin(IV) fluoride (SnF₄)

Synonym(s): Tin tetrafluoride. Tetrafluorostannane, 9Cl. Stannic fluoride

CAS Registry Number: 7783-62-2

SnF₄

Molecular Formula: F₄Sn

Molecular Weight: 194.704

Accurate Mass: 193.895812

Percentage Composition: F 39.03%; Sn 60.97%

Source/Synthesis: Synth. by fluorination of SnO

Use/Importance: Friedel-Crafts catalyst

Physical Description: Hygroscopic white cryst.

Boiling Point: Subl. 705°

Solubility: V. sol. H₂O

Other Data: Forms octahedral complexes with a variety of ligands

Aldrich: 33347-6

References:

Haendler, H.M. *et al.*, *J.A.C.S.*, 1954, **76**, 2179, (*synth*)

Hoppe, R. *et al.*, *Naturwissenschaften*, 1962, **49**, 254, (*cryst struct*)

Beattie, I.R. *et al.*, *J.C.S.(A)*, 1971, 1910, (*ir, Raman*)

Debye, N.W.G. *et al.*, *J. Chem. Phys.*, 1974, **61**, 4770, (*Mössbauer*)

Gupta, O.D. *et al.*, *Inorg. Chem.*, 1990, **29**, 573, (*synth*)

Bork, M. *et al.*, *Z. Anorg. Allg. Chem.*, 1996, **622**, 1557-1563, (*cryst struct*)

Inorg. Synth., 1997, **31**, 92-93, (*synth, ir, Mössbauer*)