

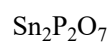


>>Entry Name: Tin(II) pyrophosphate (Sn₂P₂O₇)

Synonym(s): Stannous pyrophosphate, USAN. Diphosphoric acid tin(2+) salt (1:2). Tin diphosphate (2:1). Technescan PYP. MP 4018

CAS Registry Number: 15578-26-4

Extra CAS Registry Numbers(s): 14417-93-7



Molecular Formula: O₇P₂Sn₂

Molecular Weight: 411.363

Accurate Mass: 409.716329

Percentage Composition: O 27.23%; P 15.06%; Sn 57.72%

Source/Synthesis: Synth. from SnCl₂ + Na₂P₂O₇

Use/Importance: Diagnostic aid (skeletal imaging) in combination with ^{99m}Tc; used as dental caries prophylactic

Physical Description: Amorph. powder

Solubility: Insol. H₂O

Other Data: Dec. >400°

Hazard & Toxicity: OES: long-term 2 mg/m³ (as Sn)

Sigma: P5403

Other: Gelest SNT7980

References:

Levy, G.R. *et al.*, *Z. Kristallogr.*, 1935, **92**, 190, (*cryst struct*)

U.S. Pat., 1960, *Procter and Gamble*, 2 946 725; *CA*, **54**, 25613d, (*use*)

Klement, R. *et al.*, *Chem. Ber.*, 1963, **96**, 1022, (*synth*)

Lees, J. *et al.*, *Phys. Lett.*, 1965, **19**, 186, (*Mössbauer*)

U.S. Pat., 1968, *Monsanto*, 3 401 012; *CA*, **69**, 98099m, (*synth*)

Huberty, J. *et al.*, *J. Nucl. Med.*, 1974, **15**, 124; 279, (*synth*)

Cowley, M.J. *et al.*, *Circulation*, 1977, **56**, 192, (*use*)

Pavel, D.G. *et al.*, *J. Nucl. Med.*, 1977, **18**, 305, (*use*)