



>>Entry Name: Antimony sulfide (Sb₂S₅), 9Cl, 8Cl

Synonym(s): Diantimony pentasulfide. Antimony(V) sulfide. Antimony pentasulfide (incorr.)

CAS Registry Number: 1315-04-4

Sb₂S₅

Molecular Formula: S₅Sb₂

Molecular Weight: 403.83

Accurate Mass: 401.667992

Percentage Composition: S 39.70%; Sb 60.30%

General Statement: Has been described as an amorphous mixt. of Sb₂S₃ and S

Use/Importance: Pigment

Physical Description: Dark orange solid

Melting Point: Mp 75 dec.°

Solubility: Insol. dil. aq. acids; sol. conc. HCl; readily sol. OH⁽⁻⁾ (aq.) and CO₃²⁽⁻⁾ (aq.)

Other Data: At high temp., → Sb₂S₃ + S

Hazard & Toxicity: Dec. violently by hv and moisture

Aldrich: 43036-6

Fluka: 10788

References:

Shishenkova, I.A. *et al.*, *Metody Poluch. Khim. Reakt. Prep.*, 1967, **16**, 157; *CA*, **69**, 37543, (*synth*)

Morgan, W.E. *et al.*, *Inorg. Chem.*, 1973, **12**, 953, (*pe*)

Kravchenko, E.A. *et al.*, *J. Mol. Struct.*, 1980, **58**, 253, (*nqr, props*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, AQF500