



>>Entry Name: Silver(I) iodate (AgIO₃)

Synonym(s): Argentous iodate

CAS Registry Number: 7783-97-3

AgIO₃

Molecular Formula: AgIO₃

Molecular Weight: 282.771

Accurate Mass: 281.79431

Percentage Composition: Ag 38.15%; I 44.88%; O 16.97%

Use/Importance: Reagent for determining small quantities of chloride. Commercially available

Physical Description: Light-sensitive white cryst. powder

Solubility: Spar. sol. H₂O, HNO₃; mod. sol. 10% NH₃

Other Data: ΔH_f° -95.8 kJ mol⁻¹. Dec. between 410-470°

Aldrich: 33910-5

Fluka: 85190

References:

Hendrixson, W.S., *J.A.C.S.*, 1903, **25**, 637, (*synth*)

Sendrog, J., *J. Biol. Chem.*, 1937, **120**, 335, (*synth*)

Dasent, W.E. *et al.*, *J.C.S.*, 1960, 2429, (*ir*)

Pitts, J.J. *et al.*, *Inorg. Chem.*, 1965, **4**, 257, (*ir*)

Pacesova, L. *et al.*, *Coll. Czech. Chem. Comm.*, 1968, **33**, 3670, (*thermal props*)

Masse, R. *et al.*, *J. Solid State Chem.*, 1980, **32**, 177, (*synth, cryst struct*)

Merck Index, 11th edn., 1989, No. 8461