



>>Entry Name: Scandium(III) iodide (ScI₃)

Synonym(s): Scandium triiodide

CAS Registry Number: 14474-33-0

ScI₃

Molecular Formula: I₃Sc

Molecular Weight: 425.669

Accurate Mass: 425.669333

Percentage Composition: I 89.44%; Sc 10.56%

Physical Description: V. moisture-sensitive yellow solid

Melting Point: Mp 953° (920°)

Boiling Point: Subl. 912°

Solubility: Sol. H₂O

Aldrich: 43967-3

>>Derivative: Hexahydrate

Synonym(s): Scandium(III) iodide hexahydrate

CAS Registry Number: 34988-95-9

Molecular Formula: H₁₂I₃O₆Sc

Molecular Weight: 533.761

Accurate Mass: 533.732723

Percentage Composition: H 2.27%; I 71.33%; O 17.98%; Sc 8.42%

Physical Description: White powder or v. hygroscopic colourless cryst.

Solubility: V. sol. H₂O

Other Data: Dec. at 50°. Degree of hydration uncertain

References:

Fischer, W. *et al.*, *Z. Anorg. Allg. Chem.*, 1939, **242**, 161, (*synth, vp*)

Menkov, A.A. *et al.*, *Zh. Neorg. Khim.*, 1964, **9**, 766; *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1964, **9**, 425, (*synth, cryst struct*)

Yarovoi, A.A. *et al.*, *Izv. Akad. Nauk SSSR, Neorg. Mater.*, 1971, **7**, 437; *CA*, **78**, 150473, (*synth*)

Shepelev, N.P. *et al.*, *Zh. Neorg. Khim.*, 1971, **16**, 3220; *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1971, **16**, 1706, (*hydrate, synth, ir, dta*)

Selivanov, G.K. *et al.*, *Zh. Fiz. Khim.*, 1973, **47**, 2182; *Russ. J. Phys. Chem. (Engl. Transl.)*, 1973, **47**, 1239, (*ir*)

Kwestroo, W. *et al.*, *J. Inorg. Nucl. Chem.*, 1976, **38**, 1019, (*hydrate, synth*)

Moyer, J.W., *Proc. Electrochem. Soc.*, 1978, 78; *CA*, **89**, 69905, (*synth*)

McCollum, B.C. *et al.*, *Inorg. Chem.*, 1990, **29**, 2030, (*synth*)