



>>Entry Name: Holmium(III) iodide (HoI₃)

Synonym(s): Holmium triiodide

CAS Registry Number: 13813-41-7

HoI₃

Molecular Formula: HoI₃

Molecular Weight: 545.644

Accurate Mass: 545.643738

Percentage Composition: Ho 30.23%; I 69.77%

Physical Description: Deliquescent light yellow or yellow-brown solid

Melting Point: Mp 1010 , 989°

Boiling Point: Bp 0° 1300°

Solubility: Sol. H₂O

Aldrich: 43975-4

>>Derivative: Nonahydrate

CAS Registry Number: 75179-68-9

Molecular Formula: H₁₈HoI₃O₉

Molecular Weight: 707.781

Accurate Mass: 707.738823

Percentage Composition: H 2.56%; Ho 23.30%; I 53.79%; O 20.34%

Physical Description: Hygroscopic yellow cryst.

Solubility: Sol. H₂O

Other Data: Forms hexahydrate *in vacuo* at r.t.

References:

- Asprey, L.B. *et al.*, *Inorg. Chem.*, 1964, **3**, 1137, (*struct*)
Brown, D., *Halides of the Lanthanides and Actinides*, Wiley-Interscience, 1968, 219, (*rev*)
Carter, F.L. *et al.*, *Mater. Res. Bull.*, 1972, **7**, 519
Kwestroo, W. *et al.*, *J. Inorg. Nucl. Chem.*, 1976, **38**, 1019, (*nonahydrate, synth*)
Gmelin Handbook Inorg. Chem., Syst. No. 39, 1978, **C6**, 198, (*rev*)
Heinio, O. *et al.*, *Acta Chem. Scand., Ser. A*, 1980, **34**, 207, (*nonahydrate, synth, struct, tga*)
Inorg. Synth., 1983, **22**, 31, (*synth*)
Loktyushina, N.S. *et al.*, *Zh. Fiz. Khim.*, 1984, **58**, 2631, (*ir*)
Uwamino, Y. *et al.*, *Bull. Chem. Soc. Jpn.*, 1986, **59**, 2263, (*pe*)