



>>Entry Name: Holmium(III) oxide (Ho₂O₃)

Synonym(s): Holmia

CAS Registry Number: 12055-62-8

Extra CAS Registry Numbers(s): 39455-61-3

Ho₂O₃

Molecular Formula: Ho₂O₃

Molecular Weight: 377.859

Accurate Mass: 377.845383

Percentage Composition: Ho 87.30%; O 12.70%

Source/Synthesis: Obtd. by heating Ho salts in air

Physical Description: White solid

Melting Point: Mp 2330°

Boiling Point: Bp 3900°

Solubility: Insol. H₂O, sol. acid

Other Data: $\mu_{\text{eff}} = 10.5\mu_{\text{B}}$

Aldrich: 20844-2

Fluka: 53440

Sigma: H9750

References:

Hoekstra, H.R., *Inorg. Chem.*, 1966, **5**, 754, (*struct*)

Faithful, D.B. *et al.*, *Rev. Chim. Miner.*, 1973, **10**, 291, (*ir*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, 1974, **C1**, 410, (*rev, bibl*)

Konstantinov, V.L. *et al.*, *Spectrosc. Lett.*, 1977, **10**, 7, (*uv-vis*)

Gouteron, J. *et al.*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1979, **289**, 243, (*Raman*)

Eyring, L., *Handbook on the Physics and Chemistry of Rare Earths*, 1979, **3**, 337, (*rev*)

Michiels, E. *et al.*, *Anal. Chem.*, 1984, **56**, 1115, (*ms*)

Fierro, J.L.G. *et al.*, *J. Colloid Interface Sci.*, 1984, **100**, 303, (*use*)