



>>Entry Name: Holmium(*III*) sulfate (Ho₂(SO₄)₃)

CAS Registry Number: 15622-40-9

Ho₂(SO₄)₃

Molecular Formula: Ho₂O₁₂S₃

Molecular Weight: 618.051

Accurate Mass: 617.715828

Percentage Composition: Ho 53.37%; O 31.06%; S 15.56%

Source/Synthesis: Anhyd. salt prepd. by dehydration of hydrate

>>Derivative: Octahydrate

CAS Registry Number: 13473-57-9

Physical Description: Honey-yellow cryst.

Solubility: Sol. H₂O

Other Data: Isomorphous with Y analogue. 8-Coordinate. Other hydrates also reported. $\mu_{\text{eff}} = 10.5\mu_{\text{B}}$

Aldrich: 32574-0

Rare Chemicals Library: S46023-0

References:

- Mukherji, A. *et al.*, *J. Phys. Soc. Jpn.*, 1967, **22**, 525, (*magnetism*)
Postmus, C. *et al.*, *J. Chem. Phys.*, 1968, **48**, 3605, (*ir*)
Mascarenkas, *Acta Cryst. A, Suppl.*, 1975, **31**, 78, (*cryst struct*)
Stoehr, J. *et al.*, *Chem. Phys.*, 1975, **7**, 336, (*uv-vis*)
Sirostinkin, S.P. *et al.*, *Zh. Neorg. Khim.*, 1978, **23**, 1139, (*struct*)
Gmelin Handbook Inorg. Chem., Syst. No. 39, 1981, **C8**, 184, (*rev*)
Niinsto, L. *et al.*, *Rare Earths Mod. Sci. Technol.*, 1982, **3**, 257, (*dta, tga*)
Uwamino, Y. *et al.*, *J. Electron Spectrosc. Relat. Phenom.*, 1984, **34**, 67, (*pe*)
Saito, A., *Thermochim. Acta*, 1988, **124**, 217, (*synth, dta*)