



>>Entry Name: Ytterbium perchlorate

CAS Registry Number: 13498-08-3

Related CAS Registry Numbers(s): 14692-14-9 61565-09-1
 $\text{Yb}(\text{ClO}_4)_3$

Molecular Formula: $\text{Cl}_3\text{O}_{12}\text{Yb}$

Molecular Weight: 471.391

Accurate Mass: 468.780914

Percentage Composition: Cl 22.56%; O 40.73%; Yb 36.71%

Physical Description: Solid

Solubility: Sol. H_2O

Other Data: Several hydrates known

Hazard & Toxicity: Potentially explosive

Aldrich: 44395-6

>>Derivative: Hexahydrate

Molecular Formula: $\text{Cl}_3\text{H}_{12}\text{O}_{18}\text{Yb}$

Molecular Weight: 579.482

Accurate Mass: 576.844304

Percentage Composition: Cl 18.35%; H 2.09%; O 49.70%; Yb 29.86%

Physical Description: Colourless cryst.

Solubility: Sol. H_2O , EtOH

Other Data: Prob. contains $\text{Yb}(\text{H}_2\text{O})_6^{3(+)}$ ions

References:

Moeller, T. *et al.*, *J. Inorg. Nucl. Chem.*, 1965, **27**, 1477, (*synth*)

Bel'kova, M.M. *et al.*, *Zh. Neorg. Khim.*, 1965, **10**, 1374; *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1965, **10**, 747, (*synth, dta*)

Forsberg, J.H. *et al.*, *Inorg. Chem.*, 1969, **8**, 883, (*synth*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, 1977, **C5**, 83, (*rev*)