



>>Entry Name: Thulium(*III*) perchlorate

CAS Registry Number: 14014-10-9

Related CAS Registry Numbers(s): 61565-08-0 64777-90-8
 $\text{Tm}(\text{ClO}_4)_3$

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

Molecular Weight: 467.285

Accurate Mass: 465.779748

Percentage Composition: Cl 22.76%; O 41.09%; Tm 36.15%

Physical Description: Solid

Solubility: Sol. H_2O

Other Data: Several hydrates known

Hazard & Toxicity: Potentially explosive

Aldrich: 44394-8

>>Derivative: Hexahydrate

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

Molecular Weight: 575.376

Accurate Mass: 573.843138

Percentage Composition: Cl 18.48%; H 2.10%; O 50.05%; Tm 29.36%

Physical Description: Green cryst.

Solubility: Sol. EtOH, H_2O

Other Data: Prob. contains $\text{Tm}(\text{OH}_2)_6^{3(+)}$ ions

References:

Moeller, T. *et al.*, *J. Inorg. Nucl. Chem.*, 1968, **27**, 1477, (*synth*)

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

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