



>>Entry Name: Terbium(III) acetate

Synonym(s): Terbium triacetate

CAS Registry Number: 25519-07-7

Related CAS Registry Numbers(s): 85077-88-9

Extra CAS Registry Numbers(s): 100587-92-6

Tb(OAc)₃

Molecular Formula: C₆H₉O₆Tb

Molecular Weight: 336.059

Accurate Mass: 335.965257

Percentage Composition: C 21.44%; H 2.70%; O 28.57%; Tb 47.29%

Physical Description: Pale pink solid

Solubility: Sol. H₂O

>>Derivative: Tetrahydrate

CAS Registry Number: 15280-54-3

Molecular Formula: C₆H₁₇O₁₀Tb

Molecular Weight: 408.12

Percentage Composition: C 17.66%; H 4.20%; O 39.20%; Tb 38.94%

Physical Description: Pale pink solid

Solubility: Sol. H₂O

>>Derivative: Phen complex

Molecular Formula: C₁₈H₁₇N₂O₆Tb

Molecular Weight: 516.267

Percentage Composition: C 41.88%; H 3.32%; N 5.43%; O 18.59%; Tb 30.78%

Physical Description: Cryst.

Other Data: Dec. at 270-275°

References:

Witt, J.R. *et al.*, *J. Inorg. Nucl. Chem.*, 1963, **24**, 637, (*synth*)

Hart, F.A. *et al.*, *J. Inorg. Nucl. Chem.*, 1965, **27**, 1605, (*adduct*)

Kleiner mann, M. *et al.*, *J. Chem. Phys.*, 1968, **49**, 3901, (*adduct, fluorescence*)

Ferraro, J.R. *et al.*, *J. Inorg. Nucl. Chem.*, 1970, **32**, 1495, (*ir*)

Gmelin Handbook Inorg. Chem., Syst. No. 39 Suppl. Vol., 1984, **D5**, 31, (*rev*)