



>>Entry Name: Ytterbium(III) nitrate

Synonym(s): Trinitratoytterbium(III)

CAS Registry Number: 13768-67-7

$\text{Yb}(\text{NO}_3)_3$

Molecular Formula: $\text{N}_3\text{O}_9\text{Yb}$

Molecular Weight: 359.055

Accurate Mass: 357.898835

Percentage Composition: N 11.70%; O 40.10%; Yb 48.19%

Physical Description: Hygroscopic colourless solid

Solubility: Sol. H_2O , EtOH

>>Derivative: Trihydrate

CAS Registry Number: 76567-57-2

Other Data: Presumed 9-coord. with $\text{Yb}(\text{NO}_3)_3(\text{H}_2\text{O})_3$ molecules

>>Derivative: Tetrahydrate

CAS Registry Number: 10035-00-4

Solubility: Sol. H_2O

Other Data: Contains $\text{Yb}(\text{NO}_3)_3(\text{H}_2\text{O})_4$ molecules, found in deriv. with $(4\text{-bipyH})\text{NO}_3$

>>Derivative: Pentahydrate

CAS Registry Number: 35725-34-9

Solubility: Sol. H_2O , EtOH, Me_2CO

Other Data: Prob. contains $\text{Yb}(\text{NO}_3)_3(\text{H}_2\text{O})_3$ molecules

Aldrich: 20914-7

Fluka: 95775

Sigma: Y0125

References:

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Walker, A. *et al.*, *J. Chem. Phys.*, 1969, **43**, 2689, (*ir*)

Ivanov-Emin, B.N. *et al.*, *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1972, **17**, 1517, (*synth, ir*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **2**, 1109, (*synth*)

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