



>>Entry Name: Erbium(III) nitrate

Synonym(s): Trinitratoerbium(III)

CAS Registry Number: 10168-80-6

Related CAS Registry Numbers(s): 40309-95-3

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

Molecular Formula: ErN_3O_9

Molecular Weight: 353.275

Accurate Mass: 351.893747

Percentage Composition: Er 47.35%; N 11.89%; O 40.76%

Physical Description: Hygroscopic pink solid

Solubility: Sol. H_2O , EtOH

>>Derivative: Trihydrate

CAS Registry Number: 76567-59-4

>>Derivative: Pentahydrate

CAS Registry Number: 10031-51-3

Physical Description: Red cryst.

Melting Point: Mp 100°

Solubility: Sol. H_2O , EtOH, Me_2CO , Et_2O

Other Data: Loses $4\text{H}_2\text{O}$ at $\approx 130^\circ$. Probably contains 9-coordinate $\text{Er}(\text{NO}_3)_3(\text{H}_2\text{O})_3$ molecules. Most common hydrate

Aldrich: 29816-6

References:

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Marsh, J.K., *J.C.S.*, 1941, 561, (*synth*)

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Walker, A. *et al.*, *J. Chem. Phys.*, 1965, **43**, 2689, (*ir*)

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

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