



>>Entry Name: Praseodymium(III) nitrate (Pr(NO₃)₃)

CAS Registry Number: 10361-80-5

Pr(NO₃)₃

Molecular Formula: N₃O₉Pr

Molecular Weight: 326.922

Accurate Mass: 326.871004

Percentage Composition: N 12.85%; O 44.05%; Pr 43.10%

Physical Description: Hygroscopic pale green solid

Solubility: Sol. H₂O, EtOH

Other Data: On cryst. hexahydrate usually obt.; tetra- and pentahydrates also reported

>>Derivative: Hexahydrate

Synonym(s): Nitric acid praseodymium(3+) salt hexahydrate, 12Cl

CAS Registry Number: 15878-77-0

Extra CAS Registry Numbers(s): 59964-37-3

Molecular Formula: H₁₂N₃O₁₅Pr

Molecular Weight: 435.014

Accurate Mass: 434.934394

Percentage Composition: H 2.78%; N 9.66%; O 55.17%; Pr 32.39%

Use/Importance: Commercially available

Physical Description: Green needles

Solubility: Sol. EtOH, Me₂CO, H₂O

Other Data: Contains 10-coord. Pr(NO₃)₃(H₂O)₄ molecules

Aldrich: 25405-3

References:

Von Scheele, C., *Z. Anorg. Allg. Chem.*, 1898, **17**, 310; **18**, 352, (*synth*)

Inorg. Synth., 1957, **5**, 37, (*synth*)

Rumanova, I.M. *et al.*, *Sov. Phys. Crystallogr. (Engl. Transl.)*, 1964, **9**, 545, (*cryst struct*)

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

Mironov, K.E., *Russ. J. Inorg. Chem. (Engl. Transl.)*, 1969, **14**, 165, (*synth*)

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

Fuller, C.C. *et al.*, *Cryst. Struct. Commun.*, 1976, **5**, 349, (*cryst struct*)