



>>Entry Name: Praseodymium(III) sulfate (Pr₂(SO₄)₃)

CAS Registry Number: 10277-44-8

Pr₂(SO₄)₃

Molecular Formula: O₁₂Pr₂S₃

Molecular Weight: 570.006

Accurate Mass: 569.670284

Percentage Composition: O 33.68%; Pr 49.44%; S 16.88%

Physical Description: Hygroscopic light green powder

Solubility: Sol. H₂O; sl. sol. hot H₂O

>>Derivative: Pentahydrate

Molecular Formula: H₁₀O₁₇Pr₂S₃

Molecular Weight: 660.082

Percentage Composition: H 1.53%; O 41.21%; Pr 42.69%; S 14.57%

Physical Description: Green solid

Solubility: Spar. sol. hot H₂O

>>Derivative: Octahydrate

CAS Registry Number: 13510-41-3

Molecular Formula: H₁₆O₂₀Pr₂S₃

Molecular Weight: 714.128

Percentage Composition: H 2.26%; O 44.81%; Pr 39.46%; S 13.47%

Physical Description: Green cryst.

Solubility: Sol. H₂O

Other Data: 9-Coord., struct. adopted for lanthanides from Pr to Lu, Y

Rare Chemicals Library: S46176-8

References:

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Boulanger, F., *Ann. Chim. (Paris)*, 1952, **7**, 732, (*ir*)

Wilfong, R.L. *et al.*, *J. Am. Ceram. Soc.*, 1964, **47**, 240, (*synth*)

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