



>>Entry Name: Neodymium(III) acetate

Synonym(s): Neodymium triacetate

CAS Registry Number: 6192-13-8

Related CAS Registry Numbers(s): 16648-22-9 16922-03-5 25721-95-3 61907-70-8 72555-94-3

Nd(OAc)₃

Molecular Formula: C₆H₉NdO₆

Molecular Weight: 321.374

Accurate Mass: 318.947634

Percentage Composition: C 22.42%; H 2.82%; Nd 44.88%; O 29.87%

Physical Description: Red solid

>>Derivative: 1.5 Hydrate

Physical Description: Red solid

Solubility: Sol. H₂O

>>Derivative: Tetrahydrate

CAS Registry Number: 50484-87-2

Molecular Formula: C₆H₁₇NdO₁₀

Molecular Weight: 393.434

Percentage Composition: C 18.32%; H 4.36%; Nd 36.66%; O 40.67%

Physical Description: Red cryst.

Solubility: Sol. H₂O

>>Derivative: DMF complex

Molecular Formula: C₉H₁₆NNdO₇

Molecular Weight: 394.468

Percentage Composition: C 27.40%; H 4.09%; N 3.55%; Nd 36.57%; O 28.39%

Physical Description: Red cryst.

Melting Point: Mp 151-155°

Other Data: Loses DMF *in vacuo* at 210°

>>Derivative: Tris-urea complex

CAS Registry Number: 41579-92-4

Molecular Formula: C₉H₂₁N₆NdO₉

Molecular Weight: 501.54

Percentage Composition: C 21.55%; H 4.22%; N 16.76%; Nd 28.76%; O 28.71%

Physical Description: Red cryst. + 1.5H₂O

Melting Point: Mp 135.5-136.5°

Solubility: Sol. H₂O

>>Derivative: Thiourea complex

Molecular Formula: C₇H₁₃N₂NdO₆S

Molecular Weight: 397.496

Percentage Composition: C 21.15%; H 3.30%; N 7.05%; Nd 36.29%; O 24.15%; S 8.07%

Physical Description: Red cryst. + 1H₂O

>>Derivative: 2,2'-Bipy complex

Molecular Formula: C₁₆H₁₇N₂NdO₆

Molecular Weight: 477.56

Percentage Composition: C 40.24%; H 3.59%; N 5.87%; Nd 30.20%; O 20.10%

Physical Description: Cryst.

Melting Point: Mp 250-260°

>>Derivative: Phen complex