



>>Entry Name: **Tris(2,4-pentanedionato-*O,O'*)praseodymium(III)**

Synonym(s): Tris(acetylacetonato)praseodymium(III). Praseodymium acetylacetonate(III). Pr(acac)₃

CAS Registry Number: 14553-09-4

As Tris(1,1,1,5,5,5-hexafluoro-2,4-pentanedionato-*O,O'*)praseodymium(III), [HRL83-P](#) with
 $R^1 = R^2 = CH_3$

Molecular Formula: C₁₅H₂₁O₆Pr

Molecular Weight: 438.235

Accurate Mass: 438.041362

Percentage Composition: C 41.11%; H 4.83%; O 21.91%; Pr 32.15%

Physical Description: Moisture-sensitive green cryst.

Solubility: Sol. CS₂, acetylacetone

Other: Gelest AKP660

>>Derivative: Monohydrate

CAS Registry Number: 60238-58-6

Molecular Formula: C₁₅H₂₃O₇Pr

Molecular Weight: 456.25

Percentage Composition: C 39.49%; H 5.08%; O 24.55%; Pr 30.88%

Physical Description: Green cryst.

Melting Point: Mp 139°

>>Derivative: Dihydrate

Molecular Formula: C₁₅H₂₅O₈Pr

Molecular Weight: 474.265

Percentage Composition: C 37.99%; H 5.31%; O 26.99%; Pr 29.71%

Physical Description: Green cryst.

Other Data: 8-Coord. square antiprismatic struct. with two H₂O in coordination sphere

>>Derivative: Trihydrate

CAS Registry Number: 28105-85-3

Molecular Formula: C₁₅H₂₇O₉Pr

Molecular Weight: 492.281

Percentage Composition: C 36.60%; H 5.53%; O 29.25%; Pr 28.62%

Physical Description: Green cryst.

Melting Point: Mp 143°. Mp 144-145° (133°)

Solubility: Sol. EtOH, CHCl₃

Other Data: Presumed 8-coordinate

>>Derivative: Phen complex

CAS Registry Number: 18041-66-2

Molecular Formula: C₂₇H₂₉N₂O₆Pr

Molecular Weight: 618.444

Accurate Mass: 618.11011

Percentage Composition: C 52.44%; H 4.73%; N 4.53%; O 15.52%; Pr 22.78%

Physical Description: Green cryst.

Melting Point: Mp 221-222°

Solubility: Sol. EtOH

>>Derivative: 2,7-Dimethyl-1,8-naphthyridine complex

CAS Registry Number: 62865-47-8

Molecular Formula: C₂₅H₃₁N₂O₆Pr

Molecular Weight: 596.437

Accurate Mass: 596.12576

Percentage Composition: C 50.34%; H 5.24%; N 4.70%; O 16.09%; Pr 23.62%

Physical Description: Green cryst.

Solubility: Sol. MeOH

References: