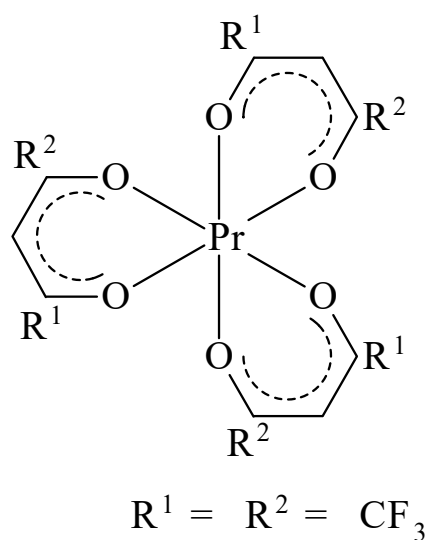




>>Entry Name: Tris(1,1,1,5,5,5-hexafluoro-2,4-pentanedionato-*O,O'*)praseodymium(III)

Synonym(s): Tris(hexafluoroacetylacetonato)praseodymium(III). Praseodymium(III) hexafluoroacetylacetonate. Pr(hfac)₃



CAS Registry Number: 47814-20-0

Molecular Formula: C₁₅H₃F₁₈O₆Pr

Molecular Weight: 762.064

Accurate Mass: 761.871766

Percentage Composition: C 23.64%; H 0.40%; F 44.87%; O 12.60%; Pr 18.49%

Physical Description: V. hygroscopic light green cryst.

Melting Point: Mp 148-151°

Boiling Point: Subl._{0.05} 180°

Solubility: Sol. Et₂O, MeOH

Other Data: Uncertain whether anhyd.

Other: Gelest AKP657

>>Derivative: Trihydrate

CAS Registry Number: 18911-47-2

Molecular Formula: C₁₅H₉F₁₈O₉Pr

Molecular Weight: 816.11

Percentage Composition: C 22.08%; H 1.11%; F 41.90%; O 17.64%; Pr 17.27%

Physical Description: Green cryst.

>>Derivative: Bis-tributylphosphine oxide complex

CAS Registry Number: 98645-54-6

Molecular Formula: C₃₉H₅₇F₁₈O₈P₂Pr

Molecular Weight: 1198.701

Accurate Mass: 1198.23167

Percentage Composition: C 39.08%; H 4.79%; F 28.53%; O 10.68%; P 5.17%; Pr 11.76%

Use/Importance: Volatility allows separation from other lanthanides by g.c.

Physical Description: Cryst.

Melting Point: Mp 218-222°

References:

Berg, E.W. *et al.*, *Anal. Chim. Acta*, 1968, **40**, 101

Richardson, M.F. *et al.*, *Inorg. Chem.*, 1971, **10**, 498, (*synth*)

Gmelin Handbook Inorg. Chem., Syst. No. 39, 1981, **D3**, 105, (*rev*)

Hellmuth, K.H. *et al.*, *Fresenius' Z. Anal. Chem.*, 1985, **321**, 123, (*complex*)