>>**Entry Name: Praseodymium(*III*) chloride ($PrCl_3$)**
Synonym(s): Praseodymium trichloride

CAS Registry Number: 10361-79-2

$PrCl_3$

Molecular Formula: Cl_3Pr
Molecular Weight: 247.266
Accurate Mass: 245.814103
Percentage Composition: Cl 43.01%; Pr 56.99%

Physical Description: Hygroscopic blue-green needles
Melting Point: Mp 786°
Boiling Point: Bp 1700° (1905°)
Solubility: Sol. H_2O, EtOH

Aldrich: 45121-5

>>**Derivative:** Hexahydrate

CAS Registry Number: 17272-46-7
Physical Description: Cryst.
Other Data: Isostructural with Nd, Sm, Gd, Dy, Lu analogues. Contains $[PrCl_2(OH_2)_6]^{(+)}$ ions with square antiprismatic coord.
Aldrich: 20514-1

>>**Derivative:** Heptahydrate
Synonym(s): Tetradecaaquadi-μ-chlorodipraseodymium(4+) tetrachloride

CAS Registry Number: 10025-90-8
Molecular Formula: $Cl_3H_{14}O_7Pr$
Molecular Weight: 373.372
Accurate Mass: 371.888058
Percentage Composition: Cl 28.49%; H 3.78%; O 30.00%; Pr 37.74%
Physical Description: Green cryst.
Melting Point: Mp 115° (109°)
Solubility: V. sol; H_2O, sol. EtOH
Other Data: Begins to dehydrate at 65°

Aldrich: 20413-7

>>**Derivative:** Bis-THF complex

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