



>>Entry Name: Yttrium chloride (YCl₃)

Synonym(s): Yttrium trichloride

CAS Registry Number: 10361-92-9

YCl₃

Molecular Formula: Cl₃Y

Molecular Weight: 195.264

Accurate Mass: 193.812405

Percentage Composition: Cl 54.47%; Y 45.53%

Physical Description: Hygroscopic white cryst.

Melting Point: Mp 721° (709°)

Boiling Point: Bp 1507°

Solubility: Sol. H₂O, EtOH, Py, DMSO; sl. sol. THF, DMF

Other Data: Forms hexahydrate

Aldrich: 45136-3

>>Derivative: Hexahydrate

Synonym(s): Hexaaquadichloroyttrium(1+) chloride

CAS Registry Number: 10025-94-2

Molecular Formula: Cl₃H₁₂O₆Y

Molecular Weight: 303.355

Accurate Mass: 301.875795

Percentage Composition: Cl 35.06%; H 3.99%; O 31.64%; Y 29.31%

Physical Description: Deliquescent colourless cryst.

Melting Point: Mp 164-165° (161°)

Solubility: Sol. H₂O, EtOH

Other Data: Formulated as [YCl₂(OH₂)₆]⁽⁺⁾Cl⁽⁻⁾. Loses 5H₂O at 100-110°. May be dehydrated in stream of HCl

Aldrich: 21164-8

Fluka: 95810

References:

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