



>>Entry Name: Hexafluorotitanate(IV)(2-), 11Cl

CAS Registry Number: 19200-76-1

Related CAS Registry Numbers(s): 17116-13-1

[TiF₆]²⁽⁻⁾ (*O_h*)

Molecular Formula: F₆Ti²⁽⁻⁾

Molecular Weight: 161.87

Accurate Mass: 161.938365

Percentage Composition: F 70.42%; Ti 29.58%

Use/Importance: Uses include surface treatment of aluminium, as a component in dental impression materials and cements, catalyst for polyethylene terephthalate, component in fireproofing textiles

>>Derivative: Di-H compd.

CAS Registry Number: 17439-11-1

Molecular Formula: F₆H₂Ti

Molecular Weight: 163.886

Accurate Mass: 163.954015

Percentage Composition: F 69.55%; H 1.23%; Ti 29.22%

Source/Synthesis: Synth. by crystallisation from a soln. of TiO₂ in HF aq.

Physical Description: White solid

>>Derivative: Di-K salt

Synonym(s): Potassium hexafluorotitanate(IV). Potassium titanium fluoride (K₂TiF₆)

CAS Registry Number: 16919-27-0

Molecular Formula: F₆K₂Ti

Molecular Weight: 240.067

Accurate Mass: 239.865779

Percentage Composition: F 47.48%; K 32.57%; Ti 19.94%

Source/Synthesis: Synth. by adding KCl to a soln. of TiO₂ in HF aq.

Physical Description: White solid

Aldrich: 30838-2

Fluka: 60324

>>Derivative: Cd salt

CAS Registry Number: 22925-86-6

Molecular Formula: CdF₆Ti

Molecular Weight: 274.281

Accurate Mass: 275.841722

Percentage Composition: Cd 40.98%; F 41.56%; Ti 17.46%

Source/Synthesis: Synth. by dissolving TiO₂ in HF aq. and adding CdCl₂

Physical Description: White solid + 6H₂O

>>Derivative: Di-NH₄ salt

CAS Registry Number: 16962-40-6

Molecular Formula: F₆H₈N₂Ti

Molecular Weight: 197.947

Accurate Mass: 198.007113

Percentage Composition: F 57.59%; H 4.07%; N 14.15%; Ti 24.19%

Source/Synthesis: Synth. by dissolving TiO₂ in HF aq. and adding NH₄F

Use/Importance: Commercially available

Physical Description: White solid + 6H₂O

Solubility: Sol. H₂O

Other Data: Dec. on heating

Aldrich: 20474-9

Fluka: 9824

References: