



Molecular Weight: 235.533
Accurate Mass: 235.893579
Percentage Composition: Al 11.46%; F 48.40%; Li 2.95%; Sr 37.20%
Source/Synthesis: Synth. from LiF + SrF₂ + AlF₃
Use/Importance: Cr³⁽⁺⁾ and Ce³⁽⁺⁾ doped crystals are used in laser devices
Physical Description: Cryst.

>>Derivative: Tri-NH₄ salt

CAS Registry Number: 7784-19-2

Molecular Formula: AlF₆H₁₂N₃
Molecular Weight: 195.087
Accurate Mass: 195.075079
Percentage Composition: Al 13.83%; F 58.43%; H 6.20%; N 21.54%
Source/Synthesis: Synth. from H₃AlF₆ and NH₄OH
Use/Importance: Possible precursor for synth. of AlN
Physical Description: Hygroscopic white powder
Solubility: Insol. EtOH

Aldrich: 43581-3

>>Derivative: Tris-acetamidinium salt

CAS Registry Number: 153014-62-1
Molecular Formula: C₆H₂₁AlF₆N₆
Molecular Weight: 318.244
Accurate Mass: 318.154726
Percentage Composition: C 22.64%; H 6.65%; Al 8.48%; F 35.82%; N 26.41%
Source/Synthesis: Synth. from Al and H₃CC(NH)NH₂ in aq. HF
Physical Description: Air-stable colourless cryst.
Solubility: Sol. H₂O; insol. MeOH, EtOH

References:

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