



>>Entry Name: Zinc fluoride (ZnF₂)

CAS Registry Number: 7783-49-5

Extra CAS Registry Numbers(s): 73640-07-0

ZnF₂

Molecular Formula: F₂Zn

Molecular Weight: 103.387

Accurate Mass: 101.925951

Percentage Composition: F 36.75%; Zn 63.25%

Physical Description: Tetragonal yellow cryst.

Melting Point: Mp 872°

Boiling Point: Bp 1500°

Solubility: Sl. sol. H₂O (1.62 g per 100 cm³ at 20°); spar. sol. HF; sol. HCl, HNO₃, NH₄OH

Aldrich: 20556-7

Fluka: 96481

>>Derivative: Dihydrate

CAS Registry Number: 19250-49-8

Molecular Formula: F₂H₄O₂Zn

Molecular Weight: 139.417

Accurate Mass: 137.947081

Percentage Composition: F 27.25%; H 2.89%; O 22.95%; Zn 46.90%

Source/Synthesis: Obt. by slow evap. of a soln. of ZnF₂ in 40% HF at 34°

Physical Description: Orthorhombic cryst.

Other Data: Octahedral Zn, coord. to 4F + 2O. Loses 2H₂O at 100°; dec. in air to Zn(OH)F

>>Derivative: Tetrahydrate

CAS Registry Number: 13986-18-0

Molecular Formula: F₂H₈O₄Zn

Molecular Weight: 175.448

Accurate Mass: 173.968211

Percentage Composition: F 21.66%; H 4.60%; O 36.48%; Zn 37.27%

Physical Description: Colourless cryst.

Solubility: Sol. H₂O, acid, alkali

Other Data: Two cryst. forms descr.: in both octahedral Zn is coord. to 4O + 2F. Loses 4H₂O at 100°

References:

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