



>>Entry Name: Zinc selenate (ZnSeO₄)

Synonym(s): Zinc orthoselenate

CAS Registry Number: 13597-54-1

ZnSeO₄

Molecular Formula: O₄SeZn

Molecular Weight: 208.348

Accurate Mass: 207.825325

Percentage Composition: O 30.72%; Se 37.90%; Zn 31.39%

Source/Synthesis: Anhyd. salt formed by dehydration of hydrates at 330°

Physical Description: White triclinic cryst.

Solubility: Sol. H₂O

Other Data: Dec. at 590° to ZnSeO₃

>>Derivative: Monohydrate

CAS Registry Number: 14912-38-0

Other Data: Isomorphous with ZnSO₄·H₂O. Dehydrates at 330°

>>Derivative: Trihydrate

CAS Registry Number: 55004-57-4

>>Derivative: Pentahydrate

CAS Registry Number: 7446-23-3

Physical Description: White triclinic cryst.

Other Data: Dehydrates to monohydrate at 190°

>>Derivative: Hexahydrate

Synonym(s): Hexaaquazinc(2+) selenate

CAS Registry Number: 7446-24-4

Source/Synthesis: Synth. from basic ZnCO₃ and aq. H₂SeO₄

Physical Description: Cryst. (H₂O)

Other Data: Dehydrates to pentahydrate at 100°. Crysts. are chiral. Contains octahedral [Zn(OH)₆]²⁽⁺⁾, tetrahedral [SeO₄]²⁽⁻⁾ linked via H-bonds

References:

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Duval, C. et al., Z. Elektrochem., 1960, **64**, 582, (ir, hexahydrate)

Courtine, P., Ann. Chim. (Paris), 1966, **1**, 303, (synth, struct, hexahydrate)

Pistorius, C.W.F.T., Z. Anorg. Allg. Chem., 1966, **347**, 223, (struct)

Palmer, R.A. et al., J.C.S. Dalton, 1978, 977, (cryst struct, hexahydrate)

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Vojtisek, P. et al., Z. Chem., 1987, **27**, 345

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