



>>Entry Name: **Zinc(II) hexafluorosilicate**, 9CI

Synonym(s): Zinc fluosilicate. Zinc silicofluoride

CAS Registry Number: 16871-71-9

$\text{ZnSiF}_6$

Molecular Formula:  $\text{F}_6\text{SiZn}$

Molecular Weight: 207.466

Accurate Mass: 205.89649

Percentage Composition: F 54.94%; Si 13.54%; Zn 31.52%

>>Derivative: Hexahydrate

CAS Registry Number: 18433-42-6

Molecular Formula:  $\text{F}_6\text{H}_{12}\text{O}_6\text{SiZn}$

Molecular Weight: 315.557

Accurate Mass: 313.95988

Percentage Composition: F 36.12%; H 3.83%; O 30.42%; Si 8.90%; Zn 20.72%

Source/Synthesis: Synth. from  $\text{ZnCO}_3$  + aq.  $\text{H}_2\text{SiF}_6$

Use/Importance: Used to harden concrete

Physical Description: Cryst. ( $\text{H}_2\text{O}$ )

Other Data: Struct. consists of stacks of  $[\text{Zn}(\text{OH}_2)_6]^{2(+)}$  and  $[\text{SiF}_6]^{2(-)}$  octahedra in CsCl-type lattice

#### References:

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Jannek, H.D. *et al.*, *Z. Naturforsch., A*, 1975, **36**, 1615, (*pmr*, *F-19 nmr*)  
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