



>>Entry Name: Magnesium sulfite, 9CI

Synonym(s): Sulfurous acid magnesium salt

CAS Registry Number: 7757-88-2

MgSO₃

Molecular Formula: MgO₃S

Molecular Weight: 104.369

Accurate Mass: 103.941857

Percentage Composition: Mg 23.29%; O 45.99%; S 30.72%

Source/Synthesis: Synth. by passing SO₂ through an aq. suspension of MgCO₃

>>Derivative: Trihydrate

CAS Registry Number: 19086-20-5

Molecular Formula: H₆MgO₆S

Molecular Weight: 158.415

Accurate Mass: 157.973552

Percentage Composition: H 3.82%; Mg 15.34%; O 60.60%; S 20.24%

Physical Description: Cryst.

Other Data: Loses H₂O >130°

>>Derivative: Hexahydrate

CAS Registry Number: 13446-29-2

Molecular Formula: H₁₂MgO₉S

Molecular Weight: 212.46

Accurate Mass: 212.005247

Percentage Composition: H 5.69%; Mg 11.44%; O 67.77%; S 15.09%

Physical Description: Cryst.

Other Data: Loses H₂O >70° to give the trihydrate

References:

Wendling, J.P. *et al.*, *Acta Cryst.*, 1964, **17**, 66, (*cryst struct, trihydrate*)

Lutz, H.D. *et al.*, *Z. Naturforsch., B*, 1977, **32**, 1230-1238, (*ir, Raman, cryst struct*)

Harrison, W.D. *et al.*, *Polyhedron*, 1983, **2**, 153-156, (*synth, ir, Raman*)

Lutz, H.D. *et al.*, *Thermochim. Acta*, 1984, **74**, 323-330, (*ir, Raman*)

Bats, J.W. *et al.*, *Acta Cryst. B*, 1986, **42**, 552-557, (*cryst struct, hexahydrate*)

Rieger, A. *et al.*, *J. Cryst. Growth*, 1994, **137**, 595-597, (*cryst struct, trihydrate*)