



>>Entry Name: Manganese sulfide (MnS), 11Cl

CAS Registry Number: 18820-29-6

Extra CAS Registry Numbers(s): 12687-82-0
MnS

Molecular Formula: MnS

Molecular Weight: 87.004

Accurate Mass: 86.910117

Percentage Composition: Mn 63.14%; S 36.86%

Aldrich: 40094-7

>>Variant: α -form

Molecular Formula: MnS

Molecular Weight: 87.004

Accurate Mass: 86.910117

Percentage Composition: Mn 63.14%; S 36.86%

Source/Synthesis: Obt. by boiling aq. $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ containing small quantity of $\text{K}_2\text{C}_2\text{O}_4$ with excess 50% aq. NH_3 followed by saturation with H_2S

Physical Description: Green solid

Melting Point: Mp 1600°

>>Derivative: Mineral

Synonym(s): Alabandite. Allabandite. Alabandine

CAS Registry Number: 1318-06-5

Source/Synthesis: Occurs in metallic sulfide vein deposits

Physical Description: Green-black opaque cubic cryst.

Other Data: Hardness: 3.8 Mohs

>>Variant: β -form

Molecular Formula: MnS

Molecular Weight: 87.004

Accurate Mass: 86.910117

Percentage Composition: Mn 63.14%; S 36.86%

Source/Synthesis: Synth. by treating cold aq. $\text{Mn}(\text{OAc})_2 \cdot 4\text{H}_2\text{O}$ with H_2S

Physical Description: Red solid

Other Data: Forms α -form at 200°

>>Variant: γ -form

Molecular Formula: MnS

Molecular Weight: 87.004

Accurate Mass: 86.910117

Percentage Composition: Mn 63.14%; S 36.86%

Source/Synthesis: Obt. by treating boiling $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ in air-free H_2O with H_2S and $[\text{NH}_4]\text{Cl}$

Physical Description: Red solid

Other Data: Forms α -form at 200°

References: