



>>Entry Name: Manganese(II) selenide (MnSe), 11Cl

CAS Registry Number: 1313-22-0
MnSe

Molecular Formula: MnSe
Molecular Weight: 133.898
Accurate Mass: 134.854567
Percentage Composition: Mn 41.03%; Se 58.97%

>>Variant: α -form

Molecular Formula: MnSe
Molecular Weight: 133.898
Accurate Mass: 134.854567
Percentage Composition: Mn 41.03%; Se 58.97%

Source/Synthesis: From aq. Mn(II) and H₂Se
Melting Point: Mp 1535° (1460°)
Other Data: Antiferromagnetic at low temps. $\mu_{\text{eff}} = 5.58\mu_{\text{B}}$

>>Variant: β -form

Molecular Formula: MnSe
Molecular Weight: 133.898
Accurate Mass: 134.854567
Percentage Composition: Mn 41.03%; Se 58.97%

Source/Synthesis: Obt. by exposing an aq. soln. of Mn(OAc)₂/NaOAc to H₂Se
Physical Description: Brown powder
Other Data: $\mu_{\text{eff}} = 5.4\mu_{\text{B}}$. Slowly forms α -form at 350° in a sealed tube

>>Variant: γ -form

Molecular Formula: MnSe
Molecular Weight: 133.898
Accurate Mass: 134.854567
Percentage Composition: Mn 41.03%; Se 58.97%

Source/Synthesis: Obt. from ammoniacal solns. of MnCl₂ or MnSO₄ and H₂Se

References:

Baroni, A., *Z. Kristallogr.*, 1938, **99**, 336, (*synth, cryst struct*)
Cook, W.R., *J. Am. Ceram. Soc.*, 1968, **51**, 518, (*mp*)
Andresen, A.F. *et al.*, *Acta Cryst. A*, 1969, **25**, S250, (*cryst struct*)
Jacobson, A.J. *et al.*, *J. Chem. Phys.*, 1970, **52**, 4563, (*magnetism*)
Wiedemeier, H. *et al.*, *J. Solid State Chem.*, 1970, **2**, 404, (*cryst struct*)
MacLaren, R. *et al.*, *Can. J. Chem.*, 1972, **50**, 4059, (*synth, struct, magnetism*)
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