



>>Entry Name: Manganese(II) chloride (MnCl₂)

ENTRY UNDER REVIEW

Synonym(s): Manganese dichloride

CAS Registry Number: 7773-01-5

Related CAS Registry Numbers(s): 11132-78-8

MnCl₂

Molecular Formula: Cl₂Mn

Molecular Weight: 125.843

Accurate Mass: 124.875751

Percentage Composition: Cl 56.34%; Mn 43.66%

Source/Synthesis: Synth. from Mn and Cl₂ in EtOH, followed by dehydration of MnCl₂·4H₂O *in vacuo*, or by refluxing in SOCl₂

Use/Importance: Commercially available

Physical Description: Pink cryst.

Melting Point: Mp 654°

Boiling Point: Bp 1225°

Solubility: V. sol. H₂O

Other Data: Obeys Curie-Weiss law above 15°, $\mu_{\text{eff}} = 5.73\mu_{\text{B}}$. Forms large number of adducts with O and N donor ligands

Aldrich: 24458-9

Fluka: 63544

Sigma: M4000

References:

Starr, C. *et al.*, *Phys. Rev.*, 1940, **58**, 977

Osthoff, R.C. *et al.*, *J.A.C.S.*, 1954, **76**, 4732, (*synth*)

Schafer, H. *et al.*, *Z. Anorg. Allg. Chem.*, 1959, **300**, 278, (*bp*)

Chisholm, R.C. *et al.*, *J. Chem. Phys.*, 1962, **36**, 972, (*synth*)

Ferrari, A. *et al.*, *Acta Cryst.*, 1963, **16**, 846, (*struct*)

Corbett, J.D. *et al.*, *J. Inorg. Nucl. Chem.*, 1963, **25**, 1287, (*mp*)

Gutmann, V. *et al.*, *Monatsh. Chem.*, 1967, **98**, 276, (*synth*)

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