>>**Entry Name: Manganese(*II*) iodide (MnI_2)**
Synonym(s): Manganese diiodide

CAS Registry Number: 7790-33-2

MnI_2

Molecular Formula: I_2Mn
Molecular Weight: 308.747
Accurate Mass: 308.746993
Percentage Composition: I 82.21%; Mn 17.79%

Source/Synthesis: Synth. by direct interaction of elements or by reaction of MnO_2 or MnS_2 with AlI_3 at 230°
Use/Importance: Commercially available; used in synth of RMnI reagents for ketone synth.
Physical Description: Moisture- and light-sensitive pink cryst.
Melting Point: Mp 636° (620°)
Solubility: V. sol. H_2O
Other Data: $\mu_{eff} = 5.88\mu_B$; becomes antiferromagnetic at low temp. T_N 3.4K. Less stable than bromide and chloride. Forms adducts with donor molecules

Aldrich: 43973-8
Fluka: 63549

References:

Chaigneau, M. *et al.*, *Bull. Soc. Chim. Fr.*, 1958, 1192, *(synth)*
Cable, J.W. *et al.*, *Phys. Rev.*, 1962, **125**, 1860, *(struct, magnetism)*
Seifert, H.J. *et al.*, *J. Therm. Anal.*, 1974, **6**, 175, *(mp)*
McPherson, G.L. *et al.*, *Inorg. Chem.*, 1975, **14**, 1831, *(synth)*
Gmelin Handbook Inorg. Chem., *Syst. No.* 56, 1978, **C5**, 311; 1983, **C10**, 45, *(rev, bibl, uv-vis)*
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1979, **7**, 222; 1980, **8**, 312; 1981, **9**, 289, *(uses)*