>>**Entry Name: Iron(*II*) iodide (FeI_2)**
Synonym(s): Ferrous iodide. Iron diiodide. Iron protoiodide

CAS Registry Number: 7783-86-0

FeI_2

Molecular Formula: FeI_2
Molecular Weight: 309.656
Accurate Mass: 309.743885
Percentage Composition: Fe 18.04%; I 81.96%

Source/Synthesis: Obt. from iron filings + I_2
Use/Importance: Used in manuf. of alkali metal iodides, pharmaceutical preparations. and in discharge lamps. Catalyst.
Physical Description: Dark violet to black; hygroscopic, stable in moisture-free air; light sensitive
Melting Point: Mp 177°
Solubility: Sol. H_2O, EtOH, Et_2O
Other Data: Paramagnetic; $\mu_{eff} = 5.75\mu_B$ (295K)

Aldrich: 40085-8
Fluka: 44957

>>**Derivative:** Tetrahydrate

Molecular Formula: $FeH_8I_2O_4$
Molecular Weight: 381.717
Accurate Mass: 381.786145
Percentage Composition: Fe 14.63%; H 2.11%; I 66.49%; O 16.77%
Physical Description: Green cryst (H_2O)

References:

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Brauer, G.*, Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1644, *(synth)*
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