



>>Entry Name: Iron(II) bromide (FeBr₂)

Synonym(s): Ferrous bromide

CAS Registry Number: 7789-46-0

FeBr₂

Molecular Formula: Br₂Fe

Molecular Weight: 215.655

Accurate Mass: 213.811611

Percentage Composition: Br 74.10%; Fe 25.90%

Source/Synthesis: Synth. by action of (1) Br₂ vapour on Fe metal (2) HBr(g) on Fe metal

Use/Importance: Starting material for iron(II) compds. Catalyst precursor. Polym. catalyst

Physical Description: Deliquescent yellow or brown cryst.

Melting Point: Mp 684 dec.°

Boiling Point: Bp 967° extrap.

Solubility: V. sol. H₂O; sol. EtOH, Et₂O, MeCN

Other Data: $\mu_{\text{eff}} = 5.7\mu_{\text{B}}$ (295K)

Aldrich: 40083-1

>>Derivative: Dihydrate

>>Derivative: Tetrahydrate

References:

Gmelin Handbook Inorg. Chem., Syst. No. 59, 1929, **B1**, 321, (rev, bibl)

Sidgwick, N.V., *The Chemical Elements and their Compds.*, Oxford, 1950, 1332, (rev, bibl)

Kühnl, E., *Z. Anorg. Allg. Chem.*, 1962, **317**, 84, (synth)

Colton, R. *et al.*, *Halides of the First Row Transition Metals*, Wiley, N.Y., 1969, (rev, bibl)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1642, (synth)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, IGP000