



>>Entry Name: **Iron(II) hydroxide (Fe(OH)₂)**

Synonym(s): Ferrous hydroxide

CAS Registry Number: 18624-44-7

Fe(OH)₂

Molecular Formula: FeH₂O₂

Molecular Weight: 89.862

Accurate Mass: 89.940419

Percentage Composition: Fe 62.15%; H 2.24%; O 35.61%

Use/Importance: Intermediate for synth. of Fe(II) compds. Strong reducing agent

Physical Description: Pale green hexagonal cryst. or white amorph. powder

Solubility: Sol. acidic soln; insol. alkaline soln.

Other Data: Dec. on heating. Dec. on standing to Fe₃O₄

References:

Gmelin Handbook Inorg. Chem., Syst. No. 59, 1929, B1, 114, (bibl)

Nouveau Traite de Chimie Minerale, 1967, **17**, 683, (bibl)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1646, (synth)

Anderson, A.B. *et al.*, *J.A.C.S.*, 1983, **105**, 18, (bonding, props)