



>>Entry Name: Nickel(II) hydroxide (Ni(OH)₂), 9CI

Synonym(s): Nickel dihydroxide. Nickel hydroxide

CAS Registry Number: 12054-48-7

Related CAS Registry Numbers(s): 11113-74-9 36897-37-7

Ni(OH)₂

Molecular Formula: H₂NiO₂

Molecular Weight: 92.705

Accurate Mass: 91.940826

Percentage Composition: H 2.17%; Ni 63.31%; O 34.52%

Source/Synthesis: Synth. from Hexaaquanickel(II)(2+) JWL44-J + OH⁻ or from Hexaamminenickel(II)(2+) JWL39-L + H₂O

Use/Importance: Commercially available. Has applications for electrodes, Ni-Cd batteries

Physical Description: Apple green solid

Solubility: Insol. H₂O; sol. acids, NH₃ aq.

Other Data: Dec. at 230° to NiO + H₂O

Aldrich: 28362-2

Fluka: 72249

References:

Sidgwick, N.V., *The Chemical Elements and their Compds.*, Clarendon Press, 1950, 1431

Remy, H., *Treatise Inorg. Chem.*, Elsevier, 1956, **2**, 311

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1690, (*synth*)

Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **15**, 804

Minkova, N. *et al.*, *J. Mol. Struct.*, 1984, **115**, 23, (*ir, uv*)

Wells, A.F., *Structural Inorg. Chem.*, 5th Ed., Clarendon Press, 1984, 631, (*struct*)