



>>Entry Name: Nickel(II) perchlorate

CAS Registry Number: 13637-71-3

$\text{Ni}(\text{ClO}_4)_2$

Molecular Formula: Cl_2NiO_8

Molecular Weight: 257.591

Accurate Mass: 255.83237

Percentage Composition: Cl 27.53%; Ni 22.78%; O 49.69%

Hazard & Toxicity: Potentially explosive

>>Derivative: Hexahydrate

Synonym(s): Nickel(II) perchlorate hexahydrate. Hexaaquanickel(2+) diperchlorate

CAS Registry Number: 13520-61-1

Molecular Formula: $\text{Cl}_2\text{H}_{12}\text{NiO}_{14}$

Molecular Weight: 365.682

Accurate Mass: 363.89576

Percentage Composition: Cl 19.39%; H 3.31%; Ni 16.05%; O 61.25%

Source/Synthesis: Synth. from $\text{NiSO}_4 + \text{Ba}(\text{ClO}_4)_2$ in H_2O

Use/Importance: Commercially available

Physical Description: Hygroscopic blue-green cryst.

Melting Point: Mp 209° (sealed tube)

Solubility: Sol. H_2O , EtOH, Me_2CO , DMF

Hazard & Toxicity: Cancer suspect agent

Aldrich: 46388-4

Fluka: 72260

References:

Fujioka, G.S. *et al.*, *J.A.C.S.*, 1957, **79**, 2451, (*anhyd form*)

Gmelin Handbook Inorg. Chem., Syst. No. 57, 1966, **B2**, 596, (*synth, props*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, NDJ000