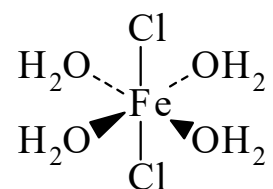




>>Entry Name: Tetraaquadichloroiron(II)

Synonym(s): Iron(II) chloride tetrahydrate. Ferrous chloride tetrahydrate



Molecular Formula: $\text{Cl}_2\text{FeH}_8\text{O}_4$

Molecular Weight: 198.813

Accurate Mass: 197.914903

Percentage Composition: Cl 35.66%; Fe 28.09%; H 4.06%; O 32.19%

Use/Importance: Commercially available. Mordant. Used in sewage treatment. Convenient iron(II) source. Catalyst

Hazard & Toxicity: Mild irritant

>>Variant: *trans*-form

CAS Registry Number: 13478-10-9

Molecular Formula: $\text{Cl}_2\text{FeH}_8\text{O}_4$

Molecular Weight: 198.813

Accurate Mass: 197.914903

Percentage Composition: Cl 35.66%; Fe 28.09%; H 4.06%; O 32.19%

Source/Synthesis: Synth. from Fe + aq. HCl above 12.3°

Physical Description: Blue green cryst., readily oxidised in soln.

Solubility: Sol. H_2O , EtOH

Other Data: Loses H_2O at 105-110°

Aldrich: 38002-4

Fluka: 44936

Sigma: F2130

>>Derivative: Dihydrate

Synonym(s): Iron(II) chloride hexahydrate. Ferrous chloride hexahydrate

CAS Registry Number: 18990-23-3

Source/Synthesis: Synth. by recryst. of FeCl_2 from H_2O below 12.3°

Physical Description: Blue green solid. Loses H_2O readily

References:

Gmelin Handbook Inorg. Chem., Syst. No. 59, 1929, B1, 198, (bibl, rev)

Inorg. Synth., 1957, **5**, 179, (synth)

Penfold, B.R. *et al.*, *Acta Cryst.*, 1959, **12**, 850, (cryst struct)

Colton, R. *et al.*, *Halides of the First Row Transition Metals*, Wiley, N.Y., 1969, 288, (bibl, rev)

Enwiya, B.Y. *et al.*, *J.C.S. Dalton*, 1982, 2231, (Mössbauer, bibl)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, FBJ000