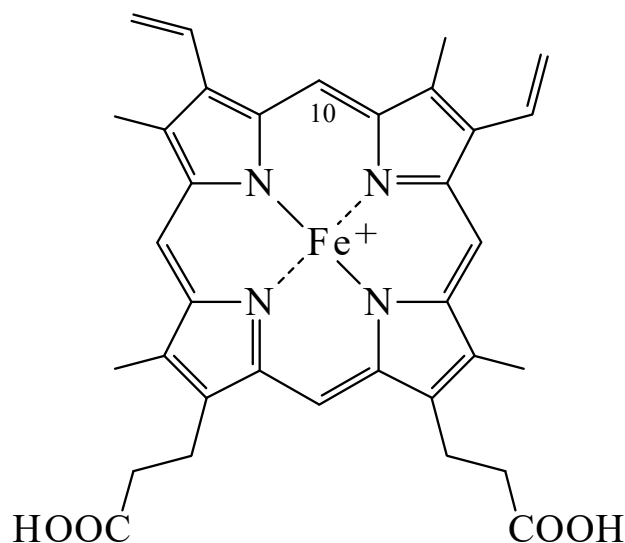




**>>Entry Name: Haemin**

**Synonym(s):** Protoporphyrin iron(III) complex. Hemin. Protoferrihaem



**CAS Registry Number:** 16009-13-5

**Related CAS Registry Numbers(s):** 15741-03-4

**Extra CAS Registry Numbers(s):** 15489-47-1

**Molecular Formula:**  $C_{34}H_{32}FeN_4O_4^{(+)}$

**Molecular Weight:** 616.498

**Accurate Mass:** 616.177295

**Percentage Composition:** C 66.24%; H 5.23%; Fe 9.06%; N 9.09%; O 10.38%

**Aldrich:** 85856-0

**Fluka:** 51280

**Sigma:** H2375

**>>Derivative:** Chloride

**Synonym(s):** Chlorohemin. Ferriheme chloride. Ferriprotoporphyrin IX chloride. Haemin IX. Hemin IX

**Molecular Formula:**  $C_{34}H_{32}ClFeN_4O_4$

**Molecular Weight:** 651.951

**Accurate Mass:** 651.146147

**Percentage Composition:** C 62.64%; H 4.95%; Cl 5.44%; Fe 8.57%; N 8.59%; O 9.82%

**Biological Source:** Obt. from blood by heating with AcOH and NaCl soln. in air

**Use/Importance:** Commercially available

**Physical Description:** Deep-violet cryst.

**Other Data:** Dec.  $>200^\circ$ . Square pyramidal at Fe

**>>Derivative:** Chloride, di-Me ester

**Synonym(s):** Haemin ester

**CAS Registry Number:** 13101-78-5

**Molecular Formula:**  $C_{36}H_{36}ClFeN_4O_4$

**Molecular Weight:** 680.004

**Accurate Mass:** 679.177447

**Percentage Composition:** C 63.59%; H 5.34%; Cl 5.21%; Fe 8.21%; N 8.24%; O 9.41%

**Physical Description:** Purple cryst. ( $CHCl_3/MeOH$ ). Photodegrades in presence of  $O_2$ ; reasonably light stable in its absence. Hydrol. in aq. acid

**Solubility:** Sol.  $CH_2Cl_2$ ,  $CHCl_3$

**>>Derivative:** Hydroxide

**Synonym(s):** Haematin. Hematin

**CAS Registry Number:** 15489-90-4

**Molecular Formula:**  $C_{34}H_{33}FeN_4O_5$

**Molecular Weight:** 633.505

**Accurate Mass:** 633.180035

**Percentage Composition:** C 64.46%; H 5.25%; Fe 8.82%; N 8.84%; O 12.63%

**Use/Importance:** Used in the treatment of acute intermittent porphyria

**UV:** [base]  $\lambda_{max}$  580 (E1%/1cm 10.5) (NaOH) (Berdy)

**Hazard & Toxicity:** LD<sub>50</sub> (rat, ivn) 43 mg/kg

**Aldrich:** 25831-8

**Sigma:** H3505