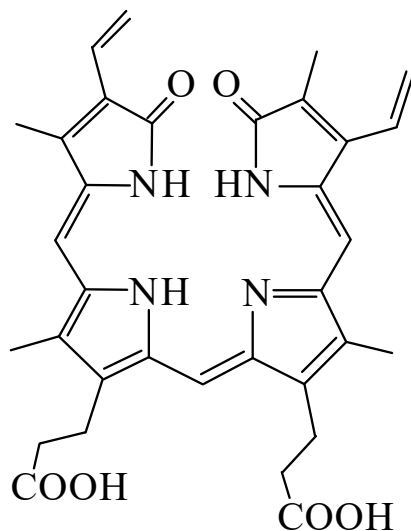




>>Entry Name: Biliverdin

Synonym(s): Biliverdin IX α



CAS Registry Number: 114-25-0

Related CAS Registry Numbers(s): 55482-27-4

Molecular Formula: C₃₃H₃₄N₄O₆

Molecular Weight: 582.655

Accurate Mass: 582.247836

Percentage Composition: C 68.03%; H 5.88%; N 9.62%; O 16.48%

Biological Source: Blue-green pigment of bile, eggshells of birds, dog placenta. Major pigment from the blue coral *Heliopora coerulea*. Primary prod. derived from Haem by oxidative ring fission *in vivo*, also formed by oxidn. of Bilirubin

Physical Description: Dark-blue green cryst. with violet sheen (CHCl₃)

Melting Point: Mp 300°

Other Data: Gives Gmelin reaction with conc. HNO₃/CHCl₃. Reduced to Bilirubin in mammals

>>Derivative: Di-Me ester

CAS Registry Number: 10035-62-8

Molecular Formula: C₃₅H₃₈N₄O₆

Molecular Weight: 610.708

Accurate Mass: 610.279136

Percentage Composition: C 68.84%; H 6.27%; N 9.17%; O 15.72%

Physical Description: Blue-green cryst. (CHCl₃/petrol)

Melting Point: Mp 220-221°

Other Data: $\lambda_{\max}$ 379, 652-660 nm

References:

Lemberg, R. *et al.*, *Haematin Compounds and Bile Pigments*, Interscience, N.Y., 1949

Rüdiger, W. *et al.*, *Annalen*, 1968, **713**, 209, (*isol, ms*)

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Sheldrick, W.S., *J.C.S. Perkin 2*, 1976, 1457, (*cryst struct*)

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Smit, K. *et al.*, *J. Phys. Chem.*, 1993, **97**, 11887, (*ir, Raman*)