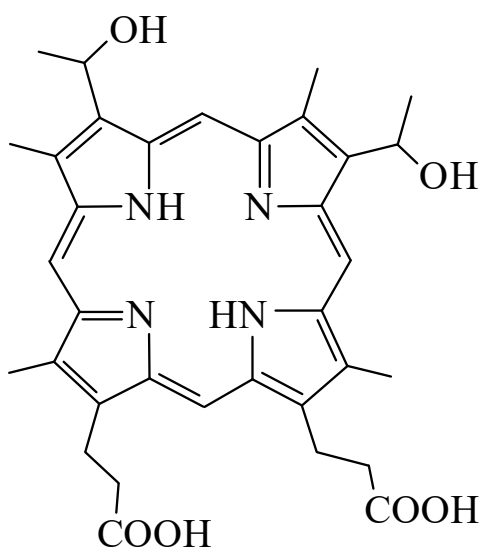




>>Entry Name: Haematoporphyrin

Synonym(s): Haematoporphyrin IX. Hematoporphyrin



CAS Registry Number: 14459-29-1

Related CAS Registry Numbers(s): 17696-69-4

Molecular Formula: C₃₄H₃₈N₄O₆

Molecular Weight: 598.697

Accurate Mass: 598.279136

Percentage Composition: C 68.21%; H 6.40%; N 9.36%; O 16.03%

Use/Importance: Antidepressant. Treatment of haematoporphyrin with H₂SO₄/AcOH followed by NaOH yields a complex mixt. of ester, ether and C-C linked dimers and trimers known as HPD, which is used as a photosensitiser for photodynamic tumour therapy (PDT)

Physical Description: Purple cryst. (Et₂O/AcOH)

Calculated Log P Data: Log P 4.75 (calc)

Other Data: Use limited by chemical instability

Hazard & Toxicity: LD₅₀ (mus, ivn) 307 mg/kg

Aldrich: 25832-6

Fluka: 51240

Sigma: H7253

>>Derivative: Di-Me ester

CAS Registry Number: 32562-61-1

Molecular Formula: C₃₆H₄₂N₄O₆

Molecular Weight: 626.751

Accurate Mass: 626.310436

Percentage Composition: C 68.99%; H 6.75%; N 8.94%; O 15.32%

Physical Description: Violet cryst. (CHCl₃/MeOH)

Melting Point: Mp 212°

References:

- Aldrich Library of FT-IR Spectra*, 1st edn., 1985, **2**, 575C, (ir)
- Fischer, H. *et al.*, *Die Chemie des Pyrrols*, Akademische Verlag, Leipzig, Vol. II, (i), 1937, 421
- Granick, S. *et al.*, *J. Biol. Chem.*, 1953, **202**, 801, (isol)
- Falk, J.E., *Porphyrins and Metalloporphyrins*, (ed. Smith, K.M.), Elsevier Elsevier, New York, 1964, 175, (rev)
- Sano, S. *et al.*, *Biochem. J.*, 1965, **97**, 250, (pmr)
- Evans, N. *et al.*, *J. Chromatogr.*, 1975, **115**, 325, (hplc, ms)
- Luzgina, V.N. *et al.*, *Khim.-Farm. Zh.*, 1977, **11**, 26, (rev, synth, pharmacol)
- Kessel, D., *Photochem. Photobiol.*, 1984, **39**, 851, (rev, pharmacol)
- Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th edn., Akademie-Verlag, 1987, 8024
- Henderson, B.W. *et al.*, *Photochem. Photobiol.*, 1992, **55**, 145, (PDT review)
- Henderson, B.W. *et al.*, *Photodynamic Therapy*, M. Dekker, New York, 1992, (book)
- Martindale, The Extra Pharmacopoeia*, 30th edn., Pharmaceutical Press, 1993, 1376
- Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PHV275