



>>Entry Name: 5,10,15,20-Tetra-4-pyridinyl-21*H*,23*H*-porphine, 9Cl

Synonym(s): *meso*-Tetra-4-pyridylporphyrin

CAS Registry Number: 16834-13-2

Related CAS Registry Numbers(s): 31183-11-6 62107-59-9 62107-60-2

Molecular Formula: C₄₀H₂₆N₈

Molecular Weight: 618.699

Accurate Mass: 618.228042

Percentage Composition: C 77.65%; H 4.24%; N 18.11%

Use/Importance: Complexing agent. Derivs. studied in fields such as energy capture, cancer detection, protein and nucleic acid binding, DNA photocleavage and corrosion inhibition

Physical Description: Deep purple solid

Aldrich: 25761-3

Fluka: 88141

Sigma: T5143

>>Derivative: Hydrochloride

Physical Description: Bright green solid

Other Data: V. hygroscopic. Loses HCl on heating

>>Derivative: Ni complex

Physical Description: Deep red solid

>>Derivative: Cu complex

Physical Description: Reddish purple solid

>>Derivative: Zn complex

Physical Description: Bright purple solid

References:

Fleischer, E.B., *Inorg. Chem.*, 1962, **1**, 493, (*synth, ir, uv*)

Stone, A. *et al.*, *J.A.C.S.*, 1968, **90**, 2735, (*cryst struct*)

Zeller, M.V. *et al.*, *J.A.C.S.*, 1973, **95**, 3855, (*pe*)

Kalyanasundaram, K., *Inorg. Chem.*, 1984, **23**, 2453, (*uv*)

Kobayashi, Y. *et al.*, *J. Phys. Chem.*, 1985, **89**, 5174, (*Raman*)

Carmichael, I. *et al.*, *J. Phys. Chem. Ref. Data*, 1986, **15**, 1, (*bibl*)

Nuwaysir, L.M. *et al.*, *Anal. Chem.*, 1989, **61**, 689, (*ms*)

Arnold, D.P., *Aust. J. Chem.*, 1989, **42**, 2265, (*bibl*)

Sari, M.A. *et al.*, *Biochemistry*, 1990, **29**, 4205, (*synth, uv, pmr, ms*)