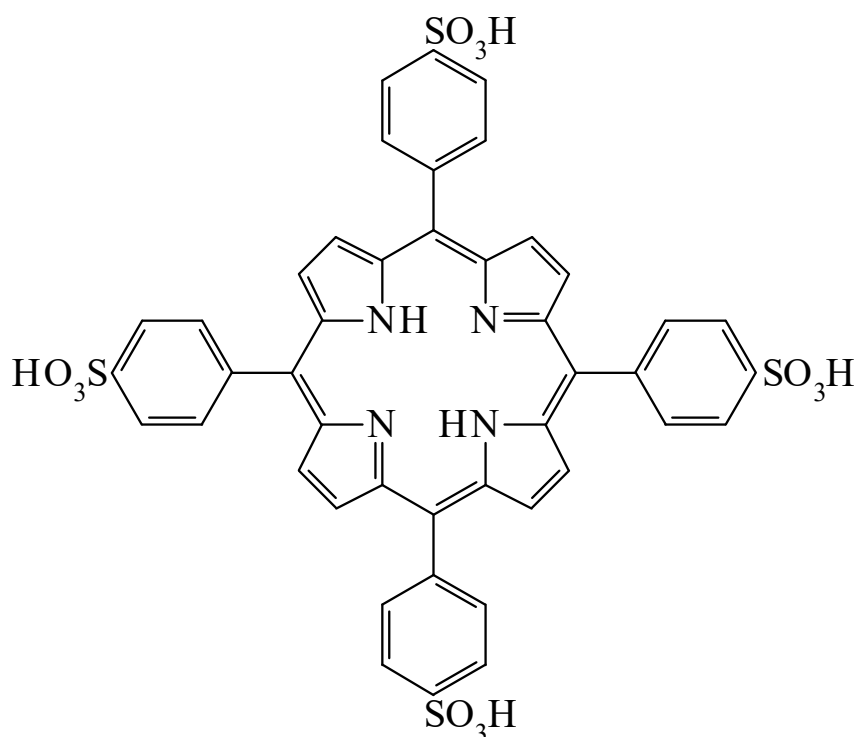




>>Entry Name: 4,4',4'',4'''-(21*H*,23*H*-Porphine-5,10,15,20-tetrayl)tetrakisbenzenesulfonic acid, 9CI

Synonym(s): $\alpha,\beta,\gamma,\delta$ -Tetrakis(*p*-sulfophenyl)porphine. 5,10,15,20-Tetrakis(4-sulfophenyl)porphine



CAS Registry Number: 35218-75-8

Related CAS Registry Numbers(s): 39050-26-5 68438-24-4

Molecular Formula: C₄₄H₃₀N₄O₁₂S₄

Molecular Weight: 935.005

Accurate Mass: 934.074306

Percentage Composition: C 56.52%; H 3.23%; N 5.99%; O 20.53%; S 13.72%

Use/Importance: Used for photometric detn. of Pb ($\lambda_{\max}$ 464 nm, ϵ 275000), Co ($\lambda_{\max}$ 432 nm, ϵ 240000), Cd ($\lambda_{\max}$ 413 nm), Pd ($\lambda_{\max}$ 410 nm, ϵ 22000), Hg ($\lambda_{\max}$ 413 nm).

Used in modification of anion-exchange resin for detn. of H₂O₂. Used as 0.004mM aq. soln. for kinetic-photometric detn. of Zn ($\lambda_{\max}$ 421 nm, in the presence of excess Cd)

Physical Description: Cryst.

Solubility: Sol. alkalis

pKa Value: pK_{a1} 4.8 (25°)

>>Derivative: *N*-Me

Synonym(s): *N*-Methyl-5,10,15,20-tetrakis(4-sulfophenyl)porphine

CAS Registry Number: 83177-98-4

Molecular Formula: C₄₅H₃₂N₄O₁₂S₄

Molecular Weight: 949.031

Accurate Mass: 948.089956

Percentage Composition: C 56.95%; H 3.40%; N 5.90%; O 20.23%; S 13.52%

Use/Importance: Used as 0.005mM aq. soln. for kinetic-photometric detn. of Cu and Zn in serum

Physical Description: Cryst.

Solubility: Sol. H₂O

References:

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Ishii, H. *et al.*, *Nippon Kagaku Zasshi*, 1978, 390, (*detn, Pd*)
Wang, W.L. *et al.*, *CA*, 1981, **94**, 202103n, (*synth, detn, Pb*)
Tabata, M. *et al.*, *Mikrochim. Acta*, 1985, **1**, 397, (*detn, Cd, Zn*)
Funahashi, S. *et al.*, *Mikrochim. Acta*, 1986, **1**, 33, (*synth, use, deriv*)
Ishii, H. *et al.*, *Anal. Sci.*, 1987, **3**, 229, (*detn, Co*)
Tabata, M., *Analyst (London)*, 1987, **112**, 141, (*detn, Hg*)
Saito, Y. *et al.*, *Talanta*, 1987, **34**, 667, (*detn, H₂O₂*)
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