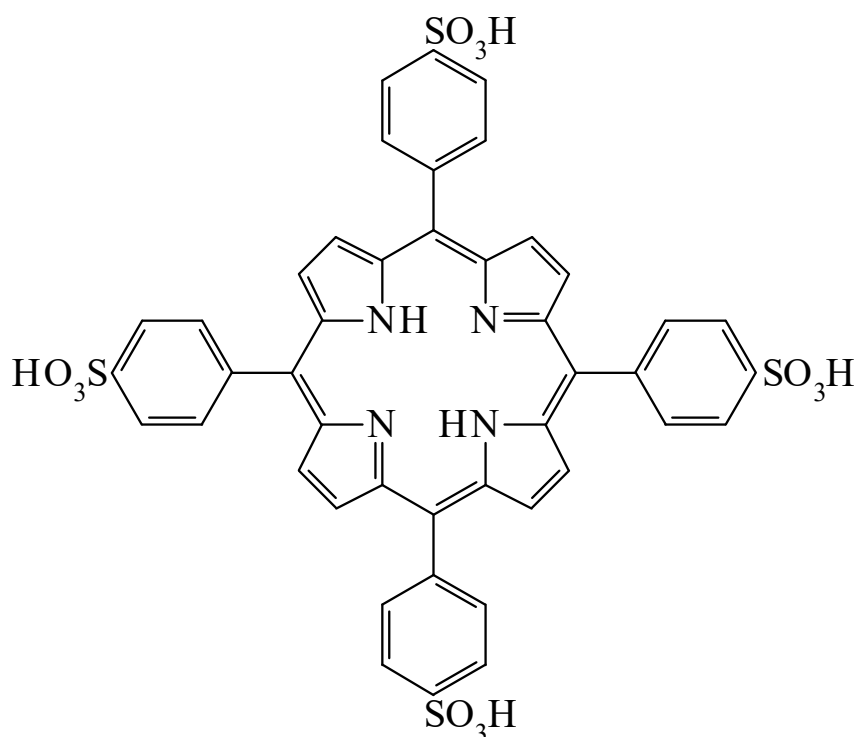




>>Entry Name: 4,4',4'',4'''-(21*H*,23*H*-Porphine-5,10,15,20-tetrayl)tetrakisbenzenesulfonic acid, 9CI

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:  $C_{44}H_{30}N_4O_{12}S_4$

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,  $\epsilon$  275000), Co ( $\lambda_{\max}$  432 nm,  $\epsilon$  240000), Cd ( $\lambda_{\max}$  413 nm), Pd ( $\lambda_{\max}$  410 nm,  $\epsilon$  22000), Hg ( $\lambda_{\max}$  413 nm).

Used in modification of anion-exchange resin for detn. of  $H_2O_2$ . 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:  $C_{45}H_{32}N_4O_{12}S_4$

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.  $H_2O$

#### References:

- Adler, A.D. *et al.*, *J.O.C.*, 1966, **32**, 476, (*synth*)  
Pasternack, R.F. *et al.*, *J.A.C.S.*, 1972, **84**, 4511, (*synth*)  
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, H<sub>2</sub>O<sub>2</sub>*)  
Tabata, M. *et al.*, *TrAC, Trends Anal. Chem. (Pers. edn.)*, 1991, **10**, 128