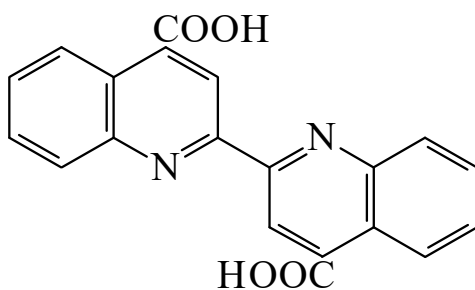




>>Entry Name: [2,2'-Biquinoline]-4,4'-dicarboxylic acid, 9CI

Synonym(s): 2,2'-Bicinchoninic acid



CAS Registry Number: 1245-13-2

Related CAS Registry Numbers(s): 979-88-4 63451-34-3

Molecular Formula: C₂₀H₁₂N₂O₄

Molecular Weight: 344.326

Accurate Mass: 344.079708

Percentage Composition: C 69.77%; H 3.51%; N 8.14%; O 18.59%

Use/Importance: Used as a 0.5mM soln. in dil. KOH or 0.1% soln. in 2% KI soln. for photometric detn. of Cu; titrimetric detn. of Cu, Mg; used in detn. of protein conc.

Physical Description: Cryst.

Melting Point: Mp 367°

Solubility: Sol. EtOH, alkalis; insol. H₂O

Fluka: 14335

Rare Chemicals Library: S4147-6

Sigma: D8640

>>Derivative: Di-Et ester

Molecular Formula: C₂₄H₂₀N₂O₄

Molecular Weight: 400.433

Accurate Mass: 400.142308

Percentage Composition: C 71.99%; H 5.03%; N 7.00%; O 15.98%

Physical Description: Cryst.

Melting Point: Mp 165.5-166°

References:

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Brown, R.F. *et al.*, *J.A.C.S.*, 1946, **68**, 2705, (*synth*)
Mustafin, I.S. *et al.*, *Zavod. Lab.*, 1963, **29**, 782, (*detn, Cu*)
Tikhonov, V.N. *et al.*, *Zh. Anal. Khim.*, 1965, **20**, 390; 1972, **27**, 673, (*detn, Cu, Mg*)
Buhl, F. *et al.*, *Chem. Anal. (Warsaw)*, 1974, **19**, 361, (*detn, Cu*)
Noskova, N.N. *et al.*, *CA*, 1975, **83**, 110722h, (*detn, Cu*)
Smith, P.K. *et al.*, *Anal. Biochem.*, 1985, **150**, 76, (*use*)