PRODUCT INFORMATION



Neocuproine

Item No. 20874

CAS Registry No.: 484-11-7

Formal Name: 2,9-dimethyl-1,10-phenanthroline

NSC 4280, VUF 7738 Synonyms:

MF: $C_{14}H_{12}N_2$ FW: 208.3 **Purity:** ≥98%

 λ_{max} : 231, 269 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Neocuproine is supplied as a crystalline solid. A stock solution may be made by dissolving the neocuproine in the solvent of choice, which should be purged with an inert gas. Neocuproine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of neocuproine in ethanol is approximately 10 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Neocuproine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, neocuproine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Neocuproine has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Neocuproine is a phenanthroline compound that is used as a chelating agent in a wide array of transition metal-catalyzed reactions.¹ It can also be used in the synthesis of aryl ketones.

Reference

1. Gouda, A.A. and Amin, A.S. Copper(II)-neocuproine reagent for spectrophotometric determination of captopril in pure form and pharmaceutical formulations. Arabian J. Chem. 3, 159-165 (2010).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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