Copper(II) sulfate solution

Product Code  C2284
Store at Room Temperature

Product Description
Molecular Formula:  CuSO₄ • 5H₂O (solid)
Molecular Weight:  249.7 (solid)
CAS Number:  7758-99-8 (solid)
Density:  2.284 g/ml

This product is 4% (w/v) CuSO₄ • 5H₂O in water. The pH of this solution is approximately 4. This product is available as a component of the Bicinchoninic Acid Kit for protein determination (Product Code BCA-1; 25 ml) and of the QuantiPro™ BCA Assay Kit (Product Code QP-BCA; 12 ml).

Copper sulfate is a reagent that is used in many large-scale applications. Applications include textile dyeing, the preparation of azo dyes, wood preservation, and the tanning of leather. Copper sulfate pentahydrate occurs in nature as the mineral chalcanthite.¹

Copper sulfate is frequently utilized to oxidize lipoproteins in the context of biological oxidative stress.²,³ It is also used in studies of plants and plant pathogens.⁴,⁵

A protocol for the isolation of recombinant yeast 6-phosphofructo-2-kinase that uses copper sulfate has been published.⁶ A procedure has been reported for the purification of dye- and metal ion-binding proteins in a polyvinylpyrrolidone-based aqueous two-phase system.⁷

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

References
1. The Merck Index, 12th ed., Entry# 2722.