

Indian Standard
SPECIFICATION FOR COPPER SULPHATE

0. FOREWORD

0.1 This Indian Standard (Second Revision) was adopted by the Indian Standards Institution on 28 January 1982, after the draft finalized by the Inorganic Chemicals (Misc) Sectional Committee had been approved by the Chemical Division Council.

0.2 Copper sulphate is used in the manufacture and processing of various Industrial products, such as fungicide mixtures, dyeing cotton and silk, preserving hides and wood, tanning leather, electric batteries, process engraving, destroying algae in pools for rot proofing of jute bags; and for the manufacture of pigments. It is also used in fine chemicals, electroplating, pharmaceuticals and as a reagent in chemical analysis. This standard, however, does not cover the analytical reagent grade of the material and the material used for electroplating, as it is covered by IS : 4847-1979*. Pharmaceutical use of the material is being excluded from this revision as the specifications of this grade are covered in the Indian Pharmacopoeia.

0.3 So far, copper sulphate has been manufactured by and large from copper scrap only. Recently, its production has started also from an indigenously available ore, namely, chalcopyrite. While preparing this revision, it has been ensured that specification for technical grade of the material would apply also to copper sulphate produced from chalcopyrite.

0.3.1 This revision provides for expression of the limits of copper sulphate in terms of copper content instead of $\text{CuSO}_4, 5\text{H}_2\text{O}$. It is hoped that this would help in overcoming controversies emanating from the loss of water of crystallization.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for copper sulphate.

*Specification for copper salts for electroplating (*first revision*).

†Rules for rounding off numerical values (*revised*).