

Copper (II) sulphate pentahydrate

Meets USP-NF, EP and BP testing specification

Product Code: TC003M

Product Description :

Molecular weight : 249.69

Molecular formula: $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

CAS No.: 7758-99-8

Synonym : Cupric sulphate pentahydrate

Quality Control:

Appearance (USP)

Deep blue, triclinic crystals or blue crystalline granules or powder

Appearance (EP, BP)

Blue, crystalline powder or transparent, blue crystals

Solubility (USP)

Very soluble in boiling water, freely soluble in water and in glycerin, slightly soluble in alcohol

Solubility (EP, BP)

Freely soluble in water, soluble in methanol, Practically insoluble in ethanol (96%)

Identification A (USP)

Reactions for sulfate

Identification A (EP, BP)

A dark blue colour is produced

Identification B (USP)

Reactions for copper

Identification B: LOD (EP, BP)

35.0 - 36.5% (at $250^\circ\text{C} \pm 10^\circ\text{C}$, 2hr)

Identification C (EP, BP)

Reactions for sulfate

Appearance of solution (EP, BP)

5% solution in water is clear

Chloride (EP, BP)

$\leq 0.01\%$

Lead (EP, BP)

$\leq 0.005\%$

Iron (USP)

$\leq 0.003\%$

Iron (EP, BP)

$\leq 0.01\%$

Potassium (USP)

$\leq 0.01\%$

Nickel (USP)

$\leq 0.005\%$

Sodium (USP)

$\leq 0.02\%$

Calcium (USP)

$\leq 0.005\%$

Loss on drying (at 250°C to constant wt.)

(USP) 33.0 - 36.5%

Loss on drying (at $250 \pm 10^\circ\text{C}$, 2hr) (EP, BP)

35.0 to 36.5%

Assay (Iodometry) (EP, BP)

99.00 - 101.00%

Assay (Iodometry, dried basis) (USP)

98.50 - 100.50%

Storage and Shelf Life:

Store below 30°C . away from bright light.

Shelf life is 48 months.

Use before expiry date given on the product label.

Disclaimer :

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