



Certificate of Analysis

Product: Copper (II) Sulfate Pentahydrate, ACS/ USP/FCC CP-B1420D
CAS# 7758-99-8 Lot: 0929103CP
Formula: $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ FW: 249.68 g/mol
MDL: MFCD00149681 Density: 2.284 g/cc at 20C
EC: 231-847-6 Melting Pt: 147°C

Meets ACS/USP/FCC Specifications

TEST	SPECIFICATIONS	RESULT
Appearance	Deep blue to blue, triclinic crystals	Conforms
Assay ¹ (on a dry basis)	98.5% - 100.5% ⁸	99.47%
Assay ²	98.5% - 102%	99.48%
Identification ¹	To Pass Test	Pass
Loss on drying ¹ (3hrs @ 105°C)	33.0% - 36.5%	35.2%
Insoluble Matter	max. 0.005%	0.003%
Chloride	max. 0.001%	<0.001%
Nitrogen compounds	max. 0.002%	<0.002%
Calcium ¹	max. 0.005%	0.0019%
Nickel ¹	max. 0.005%	0.0026%
Potassium & (0.02% max) ¹	max. 0.02%	0.0023%
Sodium ¹	max. 0.02%	0.0018%
Iron ¹	max. 0.003%	0.0015%
Solubility	Freely soluble in water and In glycerin, slightly in alcohol	Conforms

Manufacturing Date

Sept.-24,2020

¹ Meets USP Specifications

² Meets ACS Specifications

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