

SPECIFICATION

Product Name: Copper Gluconate USP Grade
Chemical Formula: $C_{12}H_{22}CuO_{14}$
CAS Number: 527-09-3
Molecular Weight: 453.84 g/mol
Appearance: A light blue coloured crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification (A) (B)	- -	Complies Complies	(A) Passes to USP Test (B) Passes to USP Test
Sulphate	PPM	Complies	NMT 500 PPM
Chloride	PPM	Complies	NMT 700 PPM
Lead	PPM	Complies	NMT 25 PPM
Arsenic	PPM	Complies	NMT 3 PPM
Reducing sub.	%	Complies	NMT 1%
Microbial Contamination	Cfu/gm	Complies	NMT 10^3 cfu/gm
Assay (On dry basis)	%	100.74%	98% to 102%

Physical Properties

- Solubility: Soluble in water. Insoluble in ethanol. Insoluble in ether. Insoluble in acetone.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.

- Storage Conditions: Store in a cool, dry, and well-ventilated place at 15–30°C. Protect from moisture, excessive humidity, direct sunlight, and contamination. Keep the container tightly closed in the original, properly labeled container to prevent moisture absorption and degradation. Store away from strong oxidizing agents, strong acids, and incompatible materials to maintain product quality, potency, and stability in accordance with USP standards.

Applications

- Use: Widely used as a source of copper, an essential trace mineral, in pharmaceutical, nutraceutical, food, and dietary supplement formulations. It helps support normal iron metabolism, red blood cell formation, connective tissue synthesis, antioxidant enzyme activity, energy metabolism, immune function, and nervous system health. It is commonly incorporated into multivitamin and multimineral tablets, capsules, sachets, powders, oral liquids, fortified foods, and dietary supplements.
- Dosage: Depends on the intended use, age, nutritional status, and formulation.

Packaging

- Standard Packing: 25 Kgs Fiber Drum and 1 Kgs or as per customer requirement.
 - Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.
- * Specifications are based on the manufacturer's provided specifications.