



TECHNICAL DATA SHEET

Product Name: Zinc Citrate

Synonyms: Trizinc dicitrate, Zinc(II) citrate

CAS No.: 546-46-3

EINECS No.: 208-901-2

Molecular Formula: $C_{12}H_{10}O_{14}Zn_3$

Molecular Weight: 574.3 g/mol

1. Product Description

Zinc Citrate is a white, odorless crystalline powder widely used as a **nutritional zinc supplement**. It provides high bioavailability and solubility compared with other zinc salts. Zinc Citrate is commonly applied in **dietary supplements, food fortification, oral care products, and pharmaceuticals**.

2. Specifications (Typical)

Item	Specification
Appearance	White to almost white powder
Assay (Zn content)	30.0 – 31.0 %
Identification	Positive (Zinc & Citrate)
Loss on Drying	≤ 10.0 %
Heavy Metals (Pb)	≤ 10 ppm
Arsenic (As)	≤ 3 ppm
Cadmium (Cd)	≤ 1 ppm
Mercury (Hg)	≤ 1 ppm
Particle Size	100% pass 60 mesh
Solubility	Slightly soluble in water, soluble in dilute acids

(Specs can be adjusted according to FCC/USP/EP standards)

3. Applications

Nutritional Supplements – Tablets, capsules, powders, and multivitamins

Food & Beverages – Fortification in functional foods and drinks

Oral Care – Used in toothpaste and mouthwash for antibacterial action

Pharmaceuticals – Ingredient in zinc deficiency treatment formulations

4. Packaging & Storage

Packaging: 25 kg/drum or 25 kg/bag with PE inner liner (customizable)

Storage: Store in a cool, dry, and well-ventilated area. Protect from moisture and direct sunlight.

Shelf Life: 24 months in unopened original packaging.

5. Safety & Regulatory Information

GRAS Status: Generally Recognized As Safe (FDA)

E Number (Food Additive): E333 (Zinc Citrates)

Handling: Avoid dust formation. Use with adequate ventilation.

HS Code: 29181500