

EDTA Tetra Sodium Salt

Tetrasodium EDTA – chelating agent

Product Description

Tetrasodium EDTA is a highly water-soluble chelating agent used in industrial cleaning formulations, water treatment and as a sequestrant in cosmetic products.

Certificate of Analysis

HSN Code: 2922.49

CAS Number: 64-02-8

Classification: Pharmaceutical / Industrial Grade

Parameter	Specification	Test Method
Appearance	White crystalline powder or granules	Visual
Assay (anhydrous basis)	97.0–102.0%	Complexometric titration
Identification	IR spectrum conforms; positive sodium and nitrogen tests	IR / Flame test
pH (1% aqueous solution)	11.0–12.0	Potentiometry
Loss on Drying at 120°C	≤ 5.0 %	USP <731>
Residue on Ignition	34.0–36.5%	USP <281>
Chelation Value (dry basis)	≥ 200 mg CaCO ₃ / g	Titrimetric
Iron (Fe)	≤ 5 ppm	AAS / ICP
Chloride	≤ 0.05 %	Argentometric
Heavy Metals (as Pb)	≤ 10 ppm	ICP-MS
Nitrilotriacetic Acid (NTA)	≤ 0.1 %	HPLC

Physical Properties

Appearance: White crystalline powder or granules, odorless

Molecular Formula: C₁₀H₁₂N₄Na₄O₈

Molecular Weight: 380.17 g/mol (anhydrous)

Solubility: Very freely soluble in water (>250 g/L at 25°C); solution is strongly alkaline (pH ~11)

Packing: 25 kg HDPE drums or multi-ply paper bags with PE inner liner; 50 kg sacks for bulk industrial use

Storage: Store in cool, dry, well-ventilated area. Highly hygroscopic — keep containers tightly sealed.

Safety & Handling

PPE: Gloves, safety goggles, dust mask – solution is strongly alkaline

Hazards:

- Strongly alkaline solution – causes skin and eye burns on prolonged contact
- Dust may irritate eyes and respiratory tract