

EDTA Di Sodium Salt

Disodium EDTA – chelating agent

Product Description

Disodium EDTA (Edetate Disodium) is a water-soluble chelating agent used as a preservative and stability enhancer in pharmaceutical preparations, cosmetics and food products. Available to BP/USP standards.

Certificate of Analysis

HSN Code: 2922.49

CAS Number: 6381-92-6

Classification: Pharmaceutical / Industrial Grade

Parameter	Specification	Test Method
Appearance	White crystalline powder	Visual
Assay (on dried basis)	99.0–101.0%	Complexometric titration
Identification	IR spectrum conforms; positive sodium and nitrogen tests	IR / Flame test
pH (1% aqueous solution)	4.0–5.5	Potentiometry
Loss on Drying at 120°C	10.0–13.7% (dihydrate water)	USP <731>
Residue on Ignition	21.5–23.5%	USP <281>
Chelation Value (dry basis)	232 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 odorless powder

Molecular Formula: $C_{10}H_{14}N_2Na_2O_{10} \cdot 2H_2O$

Molecular Weight: 372.24 g/mol (dihydrate)

Solubility: Freely soluble in water (110 g/L at 25°C); practically insoluble in most organic solvents

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

Storage: Store in cool, dry, well-ventilated area. Protect from moisture and hygroscopic conditions.

Safety & Handling

PPE: Gloves, safety goggles, dust mask

Hazards:

- Mild irritant – dust may irritate eyes and respiratory tract
- Slightly alkaline solution may irritate mucous membranes