EDTA Tetra Sodium in IRAN

www.bimalpha.com

M/s. Bimal Pharma Pvt. Ltd., Mumbai, India
e : info@bimalpha.com / info@nisinindia.com
Mob.: 0091- 9702968181 / 9322591096

EDTA Tetra Sodium : In Cosmetics, Detergents & In Cleansers

How it works in these Products :

- EDTA Tetra Sodium is a common Ingredient in Cleansers.
- It is used as a **Chelating Agent,** it means, it makes Hard Water to become soft water. It means, as a Chelating Agent, it neutralizes the Metal Ions in Hard Water and allows the surfactant to do its job.
- As water makes it way, the water cycle, it sometime picks up Metal Ions such as Calcium (Ca) & Iron (Fe).

  These Metal Ions can make Water Hard, which is a problem, because Hard Water won't get the skin cleaned.
- Shampoos & other Cleansers work as Surfactants, which are responsible for attracting Dirt & Oil and pulling it off skin, so it can be rinsed away by water.

  However, the problem is, the surfactants also attract the Metal Ions found in Hard Water, hindering the surfactant ability to cleanse the skin.
- Here, the Role to EDTA Tetra Sod. starts.
- As the Chelating Agent, it neutralizes the Metal Ions in Hard Water, and allows the surfactant to do its function. The End Result is **Soft water** and thoroughly clean the skin.
- On the some Principles, it is effectively used in Automobile & Household Cleaning products.
- In other words, this Chelating Agent binds, sequester / capture Trace amounts of Iron (Fe), Copper (Cu), Manganese (Mn), Calcium (Ca), and other Metals that occur naturally in many materials. Such naturally occurring Metals can cause Chemical Degradation, Discoloration, Scaling, Instability, Rancidity, Ineffective Cleaning Performance & other problems. EDTA Tetra Sodium helps to solve all these problems.

Application in :

- Skin care (Personal care) Products (Cosmetic)

Example :

Face Cream

Body Lotion

Body Lotion

- **Soaps & Detergent**

Soaps

Why Tetra Sodium EDTA is used in Soap ?

EDTA Tetra Sodium offers **Two Benefits** when used in Soap.

- It increases the **Shelf Life** of the soap by **Chelating** (binding up) certain Metals that can cause **DOS** (Dreaded Orange Spots, also known as **Rancidity**).

- It also **reduces** the amount of **sticky soap scum** formed, when Lye soap is used in Hard Water.

- EDTA Tetra Sodium is **more effective** than Citrate in reducing soap scum.

Detergent Powder & Liquid

What kind of EDTA to use ?

- Two kinds of EDTA for Soap Industry, **Tetra Sodium EDTA & Di Sodium EDTA**

- Tetra Sodium EDTA is used in Soap & other Alkaline products.

- Di Sodium EDTA is used in Neutral pH to slightly Acidic products.

Beauty Soap

Dosage required :

- 5 gms of Tetra Sodium EDTA is used per 1000 gms of Total Batch Weight.

- **To prevent Rancidity (DOS)** in soap, dosages may range from 0.5 gms to 2.5 gms Tetra Sodium EDTA powder per 1000 gms Total Batch Weight.

- **To also reduce Hard Water Scum**, a slightly higher dose of EDTA Tetra Sodium is needed.

E.g. : Handcrafted soapers typically use 2.5 gms to 5 gms powder per 1000 gms Batch Weight and get Good Results.

Handcrafted Aloe Tulsi Soap

Handcrafted Haldi Chandan Soap

- **Industrial & Household Cleansers ; and**
- **Liquid Laundry Detergents**

  Tetra Sodium EDTA is used to remove the Hardness Ions so that the surfactant can be fully functional.

Liquid Laundry Detergent

Example :

Industrial Cleansers

Household Cleansers

- **Automobile Cleaning Products**

  Example :

Automobile Cleaning Products

Automobile Cleaning Products

- **Food Additive / Preservation & Food Fortification**

  E D T A Tetra Sod. can be used to make

  Ferric Sodium E D T A.

  This product is used in Fortification of

  - Soy Sauce
  - Wheat Flour
  - Powdered Beverages

Fortified Soy Sauce

Fortified Wheat Flour

Powdered Beverages

Other Applications :

- Pharmaceutical as Chelating Agent & Softening Agent of Medicines
- In the **Manufacturing of paper** to maximize **Bleaching** efficiency during Pulping, prevents brightness reversion and protect bleach potency.
- **In photography,** it is used as a Bleach in photographic film processing.
  It controls the Oxidation conditions of Metal Ions (Photography, Sulphur removal from waste Gases).
- **In Chemical Process Plants.**
  In scale removal and Prevention.
  To clean Calcium (Ca) and other types of scale from Boilers, Evaporators, Heat Exchangers, Filter Cloths and Glass Lined Kettles.
- In Water Treatment, to control water Hardness and scale forming Calcium (Ca) and Magnesium (Mg) Ions and to prevent scale formation.
- Metal plating & Electronics
- Textile Industries to Improve Dying
- Building & Construction Chemicals
- Lead-Acid Batteries (to remove Sulphate Deposits)
- Catalyst of Synthetic Rubber