FINISISHED PRODUCT SPECIFICATION

Product name: EDTA Tetra Sodium (Food Grade) Dihydrate.

1)	**NOMENCLATURE**	**:**	Edetate Tetra Sodium.
		:	Ethylene Diamine Tetra Acetic Acid Tetra Sodium Salt.
		:	Edetate Sodium
2)	**EMPERICAL FORMULA**	**:**	$C_{10}H_{12}N_2Na_4O_8, 2H_2O$
3)	**CAS NO.**	**:**	10378-23-1 (Dihydrate)
4)	**MOL. WT.**	**:**	416.21 (Dihydrate)
5)	**PHYSICAL PROPERTIES**		
	MELTING RANGE	**:**	> 300°C (With Decomposition)
	BULK DENSITY	**:**	0.65 gm/cm^3 – 0.70 gm/cm^3
	PRODUCT SPECIFICATIONS		
6)	**DESCRIPTION**	**:**	Pure White Sparkling Crystalline Material.
		:	Slightly bitter in taste.
		:	Free Flowing.
7)	**PURITY (ASSAY) (Complexometric)**	**:**	Minimum 99.0%
8)	**WATER CONTENT (By K.F.)**	**:**	5% - 10% w/w
9)	**HEAVY METALS (As Pb)**	**:**	Not more than 0.001%
10)	**IRON (Fe)**	**:**	Not more than 0.001%
11)	**CHLORIDES (CL)**	**:**	Not more than 0.01%
12)	**SULPHATES (SO_4)**	**:**	Not more than 0.01%
13)	**PH (5% w/v Solution)**	**:**	10.5 to 11.5
14)	**SOLUBILITY**	**:**	Soluble in 10 parts of water
		:	Insoluble in Chloroform & Ether.
15)	**COLOUR & CLARITY**	**:**	10% w/w solution in CO_2 – free water is Clear and Colourless.
16)	**PACKING**	**:**	25 Kgs. LD Polythene Bag (800 guage) with double LDPE Liners.

APPLICATION OF EDTA TETRA SODIUM

Uses for Tetra sodium EDTA

EDTA Tetra Sodium salt is predominately used in

- Agriculture,
- Water Treatment,
- Food processing
- Pulp and Paper industries and
- In the manufacture of Cleaners and Detergents.

In Food Industries

Chelating agents bind or capture trace amounts of iron, copper, manganese, calcium and other metals that occur naturally in many materials. Such naturally occurring metals can cause foods to degrade, chemical degradation, discoloration, scaling, instability, rancidity, ineffective cleaning performance and other problems.

In Metalworking Industries

it is used for surface preparation, metal cleaning, metal plating, and in metalworking fluids.

In cleaning products

EDTA is employed to remove hard water scale, soap film, and inorganic scales. It is commonly used in a wide variety of cleaning products and formulations, including hard surface cleaners, laundry detergents, bactericidal cleaners, vehicle washes etc.

In Cosmetic Products

In personal care products like Soaps, Creams, Shampoos it is used to increase effectiveness and improve stability of the products.

Other Industries

In Photography as a bleach in photographic film processing. In the manufacturing of paper to maximize bleaching efficiency during pulping, prevent brightness reversion, and protect bleach potency.

In Scale removal and prevention

To clean calcium and other types of scale from boilers, evaporators, heat exchangers, filter cloths, and glass-lined kettles.

In Water treatment Industries

To control water hardness and scale-forming calcium and magnesium ions and to prevent scale formation.

To Rejuvenate Lead-Acid Batteries

EDTA tetra sodium salt can be used to dissolve and remove Sulphate deposits from lead acid batteries. This is not a permanent fix for old batteries but it will extend their life.