FINISHED PRODUCT SPECIFICATION

PRODUCT NAME: CALCIUM EDTA DI SODIUM (DIHYDRATE) (E-385)

1) NOMECLATURE : Edetate Di Sodium Calcium.

: Calcium Di Sodium Ethylene Diamine Tetra

Acetate, Di hydrate.

: Edetate Calcium Disodium .

2) EMPERICAL FORMULA : $C_{10} H_{12} N_2 Ca Na_2 O_{8}$ 2 $H_2 O$

3) CAS NO. : 23411-34-9 / 6766-87-6 (Di Hydrate)

4) MOL. WT. : 410.26 (Dihydrate)

5) PHYSICAL PROPERTIES

BULK DENSITY : $0.65 \text{ gm/cm}^3 - 0.70 \text{ gm/cm}^3$

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6) DESCRIPTION : White Crystalline Material.

: Odourless, Free Flowing.

7) **PURITY (ASSAY)** : Minimum 98.0% to 102%

8) IMPURITY A : 0.05% Maximum.

NITRILO TRIACETIC (Limit: 0.1% Maximum)

ACID (NTA) (By HPLC)

9) CHELATED CALCIUM CONTENT: Not less than 9.5%

10) FREE CALCIUM : Absent.

11) **HEAVY METALS** : Not more than 20 ppm. (Max.0.002%) **12) IRON** : Not more than 20 ppm. (Max. 0.002%)

13) ph (1% w/w Solution) : 6.5 to 7.5

14) SOLUBILITY : Freely soluble in Water.

(30% w/w in Water)

15) MAGNESIUM CHELATING : Passes as per USP.

SUBSTANCES

16) WATER CONTENT (By K.F.) : 13% w/w. Max.

17) ARSENIC CONTENT : Max. 3 ppm 18) WATER INSOLUBLES : NMT 0.1%.

19) SULPHATES : NMT 50 ppm (0.005%). **20) CHLORIDES** : NMT 100 ppm (0.01%).

21) PACKING : 25 Kgs. LD Polythene Bag (800 guage)

with double LDPE Liners.

22) CHELATION VALUE : One gm. of product has the equivalent

Chelation capacity of 2.44 m. moles of EDTA

23) EQUIVALENTS : It is equivalent to Dissolvine E-CA-10

It is equivalent to VERSENE CA Chelating

Agent (DOW)

APPLICATION OF CALCIUM EDTA DI SODIUM

Common Uses:

Calcium Disodium EDTA is widely used in

- As a food additive, it helps to prevent Color or Flavor deterioration.
- In the Textile and Paper Industries.
- To improve stability in pharmaceutical products, Detergents, Shampoos, Soaps, Agricultural, Chemical Sprays, Contact Lens cleaners and Cosmetics. (Approved in the U.S.)
- In Medical Laboratories and Dentist offices.
- In Chelation therapy, which helps to remove Heavy Metals from the Body and is used to treat Lead Poisoning and Radiation exposure.
- In Soft drinks containing Ascorbic Acid and Sodium Benzoate, it helps to prevent the formation of Benzene which is a known Carcinogen.

Calcium Disodium EDTA in Food Industries.

In Mayonnaise & in Margarine

It inhibits rancidity (disagreeable odor or taste of decomposing oils or fats) in salad dressings, mayonnaise, sauces, and sandwich spreads.

Foods that may contain Calcium disodium EDTA include:

- Pickled Cabbage and Cucumbers
- Canned Potatoes & Canned Cooked Mushrooms
- Cooked and canned shrimp, Clams and crabmeat
- Canned Beans
- Canned mushrooms
- Canned Carbonated Soft Drinks
- Canned Cooked Clams
- Distilled Alcoholic Beverages
- Pecan Pie Filling
- Salad Dressing
- Fermented Malt Beverages
- Pink & Red Beans (Cooked & Canned)
- Egg products
- Sauces