Technical Data Sheet

EDTA-4NA

INCI name

Tetrasodium EDTA (Ethylene Diamine Tetraacetic Acid)

Registrations

CASR-NO: 64-02-8
205-573-9

Chemical structure & Chemical Formula: C_{10}H_{12}N_{2}Na_{4}O_{8}

Specifications

Specific mass at 200C (g/ml) 1.300 ± 0.05
Sequestering power (mg Ca/g) 39.6 ± 0.5
pH of a 1% solution 11.5 ± 0.5
Iron content (ppm) ≤ 30
Bulk density Approx 450 – 500 kg/m3

Functions

The EDTA grades are aminocarboxylic acids with six functional groups whose characteristic reactions enable them to form complexes. They sequester undesirable metal ions in cosmetic preparations, preventing precipitation of the salts responsible for water hardness and protecting against rancidity and color changes caused by heavy metal ions.
Applications

Tetrasodium EDTA is recommended for alkaline products, like most handcrafted soap (and can also be used in creams and lotions).

Tetrasodium EDTA is a crystalline powder used in a variety of cosmetics and skin care products such as moisturizers, skin cleansers, shampoo, hair conditioners, and hair color.

Recommended dosage

Creams and Lotions

- 0.01 to 0.2% to improve preservative efficacy.
- 0.2 to 0.5% (by weight) to protect against discoloration and rancidity (metal-catalyst induced).
- 0.5 to 1.0% to prevent metal sulfide formation in sulfide and sulfhydrate-containing products.

Soap: 1.2 – 4% to counteract defoaming action of hardness ions.

Shampoos: 0.1% for enhanced shelf life and softening water used in dilution of shampoo during manufacture.

Storage

Store in a tightly closed container at room temperature between 15-30°C away from light and moisture.

Packing: 25 kg / bag