



VERSENE™ NA Chelating Agent



An Effective Stabilizer and Preservative for Pharmaceutical Preparations

VERSENE™ NA Chelating Agent is an effective stabilizer and preservative for pharmaceutical preparations, including medicated creams and ointments, ocular care, syrups and elixirs. This edetate disodium USP-grade product controls metal ions present in pharmaceutical formulations or processes. Left unchecked, these metals can reduce potency and performance, harm product appearance, and reduce shelf life.

VERSENE™ NA Protects Products Three Ways:

- **Antioxidant** - VERSENE™ NA Chelating Agent acts as an antioxidant, controlling oxidation which can lead to degradation and rancidity of emulsions, color changes, off-odors and reduced in-process and shelf life.
- **Antimicrobial booster** - Used as part of a preservative package, VERSENE™ NA Chelating Agent boosts the performance of many antimicrobials

by affecting the structure and viability of microbial cell walls.

- **Vitamin stabilizer** - VERSENE™ NA helps stabilize vitamins in formulations, including vitamins B and C. It is particularly useful in stabilizing vitamin B12 in multivitamin preparations containing iron. There are indications that the stability of vitamins A, D and E may also be improved through the use of VERSENE™ NA Chelating Agent.

Applications:

VERSENE™ NA Chelating Agent provides protection against metal-catalyzed reactions in a variety of pharmaceutical preparations, including:

Ocular care and nasal spray products

VERSENE™ NA is used at a concentration level of 0.05% to boost the antimicrobial performance of formulation preservative packages used in ocular care and nasal spray products.

Syrups and elixirs

The color, flavor and ingredients of

syrups, elixirs, and other pharmaceutical liquids can also be protected through the addition of 0.1% or less VERSENE™ NA Chelating Agent.

Medicated creams and ointments

VERSENE™ NA Chelating Agent is commonly used at a concentration level of 0.1-0.3% to prevent or control oxidative rancidity in medicated creams and ointments.

API Preservative

Active pharmaceutical ingredients (APIs) are often sensitive to oxidation or chemical attack either through direct attack or catalysis by transition metal ions. The addition of VERSENE™ NA Chelating Agent can minimize these effects. Unless additional quantities of multivalent cations are added to the product, 0.1% VERSENE NA is recommended as a starting point.

Vitamin and liquid nutritional drinks

VERSENE™ NA improves the overall stability of these beverages and acts as a preservative for vitamins B, C and E.

Mouthwash

The clarity of oral care solutions is improved with the addition of VERSENE™ NA.

Tablet coatings

VERSENE™ NA is used as a solution preservative and stabilizer to extend the in-process life of tablet coatings.

USP Qualification

VERSENE™ NA Chelating Agent is certified to the requirements of the U.S. Pharmacopeia. (The product will also meet the requirements of the European Pharmacopeia, Japanese Pharmacopeia, and British Pharmacopeia, however, certification to these standards will involve additional charges). VERSENE™ NA does not qualify as an injectable grade material and is not manufactured to such standards.

Available Packaging

VERSENE™ NA is available in 100 lb. net lever-lock fiber drums. Fifty-kg. containers and special packages are also available.

Product Stewardship

Dow encourages its customers and potential users to review their applications from the standpoint of human health and environmental aspects. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature, including Material Safety Data Sheets (SDS), should be consulted prior to the use of Dow products.

To learn more about VERSENE™ Chelating Agents for pharmaceutical product applications, contact the Dow location in your area, as listed below.

For more information, contact us at your convenience:

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