



Technical Data Sheet

VERSENE™ CA Chelating Agent

Product Availability

- North America
- Europe
- Latin America
- Pacific
- India
- Middle East and Africa

Applications

- Food and beverage

Active Ingredient Name

Calcium disodium ethylenediaminetetraacetate dihydrate.

CAS Number

23411-34-9

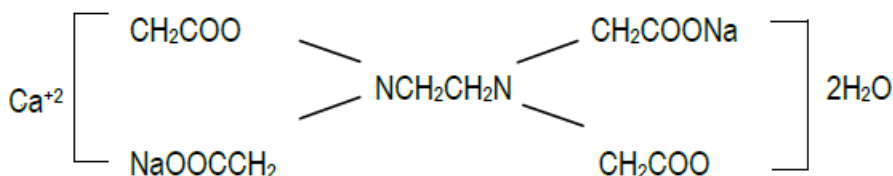
For TSCA purposes, reference CAS No. 62-33-9 for anhydrous CaNa₂EDTA.

Chemical Formula

C₁₀H₁₂N₂O₈CaNa₂ • 2H₂O or

Ca(NaOOCCH₂)(OOCCH₂) NCH₂CH₂N(CH₂COO)(CH₂COONa)₂ • 2H₂O

Chemical Structure



Molecular Weight

410.26

Other Names

CaNa₂H₂EDTA • 2H₂O, Calcium Disodium EDTA FCC

Description

VERSENE™ CA calcium disodium EDTA is a food grade chelating agent which meets the requirements of the Food Chemicals Codex. VERSENE™ CA Chelating Agent is the calcium chelate of EDTA, in dry form, and may be used in direct food applications. It is well suited for applications calling for the neutral pH to acidic conditions common to most food products. The principal function of VERSENE™ CA is to chemically bind and render inactive those trace metals having an adverse impact on the color, flavor, clarity, shelf life, and other important characteristics of foods. As a cleared food additive, the allowed applications and levels of use in food products are specifically regulated by the US FDA. Similar clearances exist in other countries. All such uses must conform to the regulations. Calcium disodium EDTA is considered a food preservative in the US FDA regulations. VERSENE™ CA is Kosher certified and Pareve for Passover use.

Typical Properties

Calcium Chelation Value	VERSENE™ CA Chelating Agent is already a calcium chelate of EDTA
Equivalent Chelation Capacity	One gram of VERSENE™ CA Chelating Agent has the equivalent chelation capacity of 2.44 mmoles of EDTA
Metal Chelation Capacity	Parts chelant per part metal (w/w)
Ca	- (use levels are regulated)
Mg	- (use levels are regulated)
Fe	7.8 (use levels are regulated)
Cu	6.8 (use levels are regulated)
Mn	7.9 (use levels are regulated)
% Assay	97.0-102.0 wt% as $\text{CaNa}_2\text{EDTA} \cdot 2\text{H}_2\text{O}$ 91.2 wt% as CaNa_2EDTA
Appearance	Solid, white, powder
Bulk Density	640 kg/m ³ or 40 lb/cu ft
pH	6.5–7.5 (1 wt% solution)
Water Solubility	Approximately 30 wt% at 25°C/77°F

The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications.

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