Solvitar™ sequestering agent

Keeping food fresh

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Nouryon

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Solvitar™ sequestering agent is our high-purity, food-grade sequestrant that is used to prevent oxidation in different types of food and beverages.

Trace heavy metals can react with ingredients present in processed food resulting in several negative effects on freshness and appearance. Trace metal ions will be present in all processedfood products from raw materials, process water and process equipment. Typical trace metals found in food are copper, iron, manga-nese and zinc. These trace metals can interact with other compounds in food and cause several food spoilage reactions.

Solvitar™ sequestering agent functionality

The reaction of trace metal ions with both organic and inorganic components can be retarded or prevented by the addition of Solvitar™ sequestering agent which will promote color retention, texture retention, flavor retention, product clarity, odor reduction and otherwise ensure that the product is free from spoilage.

Solvitar™ sequestering agent can control oxidation catalyzed by trace heavy metal ions and in this way act as a kind of preservative. Oxidation is a radical chain reaction where free radicals are formed by exposure to air or light. The reaction is catalyzed by free metal ions in the food, which speed up the formation of radicals and thus reduce the shelf life of food products.

In fat based products dangerous aldehydes are formed by the chain reaction leading to rancidity without the addition of Solvitar™ sequestering agent.

To prevent oxidation of food and beverages,all trace metals can be captured by Solvitar™ sequestering agent. Once the metal ions are sequestered, only limited amount of other anti-oxidants need tobe added to prevent oxidation completely.

Solvitar™ sequestering agent has been proven to be more effective, and certainly more cost effective, than other type of chelating agents in stabilizing food and beverages.

Featured applications

Sauces and dressings

Many processed food products can suffer from spoilage reactions caused by trace metal ions. In fat-based products, like emulsified saucesand dressings, trace metal ions act as catalysts in the oxidation reaction of the fats and lead to rancidity. Poly-unsaturared fatty acids like Omega-3 are highly sensitive for oxidation reactions and can be stabilized by the addition of Solvitar™ sequestering agent.

Canned vegetables and legumes

Enzymatic browning of vegetables like mushrooms and artichockes is catalyzed by trace metal ions. In canned legumes and corn, discoloration is caused by the reaction of trace metal ions with natural organic components in the vegetables. Iron present in processed potatoes, both canned and frozen, can lead to darkening or graying of the potato surface. These unwanted effects can all be stopped with the addition of Solvitar™ sequestering agent.

Fish and shellfish

Fish and shellfish products naturally contain high concentrations of trace metals such as magnesium and iron. Adding Solvitar™ sequestering agent can prevent off-flavors, bad odors, rancidity, discoloration and formation of glass-like magnesium crystals.

Carbonated and alcoholic beverages

In soft drinks, the addition of Solvitar™ sequestering agent can support vitamin C stabilization and minimize color fading and flavor loss. In beer and other alcoholic beverages, Solvitar™ sequestering agent reduces gushing, promotes clarity and retains color and flavor.

Product features

Solvitar™ sequestering agent is a food-grade calcium disodium EDTA complex that is produced according to the most stringent regulations at our facilities in the Netherlands.
Solvitar™ sequestering agent is an important additive in many food and beverage applications to preserve freshness, flavor and color and extend a products shelf life.

Specifications

To use calcium disodium EDTA in food, the product should be of pure quality and meet certain specification criteria. Solvitar™ sequestering agent meets the latest specifications set out by the following monographs:

- Food Chemical Codex (FCC)
- European Directive
- JECFA

The free-flowing white microgranules are tasteless, odourless and stable when exposed to heat and light. The production facility is certified according to FSSC 22000 (Food Safety Certification Scheme for food manufacturing in compliance with ISO 22000 and PAS 220).

Solvitar™ sequestering agent is Kosher/Parve and Halal certified.

Approvals

Solvitar™ sequestering agent is approved for use in many countries including the United States, the European Union (E385), Australia, New Zealand, China and Japan. Solvitar™ sequestering agent is also evaluated and listed in the Codex General Standard for Food Additives as calcium disodium EDTA (INS 385) and may be used in many food categories.

Contact us directly for detailed product information and sample request
website | solvitar.com
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Nouryon

Nouryon is a global, specialty chemicals leader. Markets and consumers worldwide rely on our essential solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. Furthermore, the dedication of more than 7,900 employees with a shared commitment to our customers, business growth, safety, sustainability and innovation has resulted in a consistently strong financial performance. We operate in over 80 countries around the world with a portfolio of industry-leading brands. Visit our website and follow us @Nouryon and on LinkedIn.

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