



Solvitar™
Keeping food fresh



Nouryon

Product information

Solvitar is a food-grade calcium EDTA complex that is produced according to the most stringent regulations at our factory in Herkenbosch, the Netherlands. Nouryon is present globally and can ship Solvitar to many countries.

Specifications

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

- European Pharmacopoeia (EP)
- United States Pharmacopoeia (USP)
- 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 is Kosher/Parve and Halal certified.

Approvals

Solvitar is approved for use in many countries including the United States, the European Union (E385), Australia and New Zealand, China and Japan. Solvitar 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

You can read more on www.solvitar.com



Solvitar™

Solvitar is Nouryon's high-purity, food-grade chelate that can be used to stabilize 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 processed food products from raw materials, process water and process equipment. Typical trace metals found in food are copper, iron, manganese and zinc. These trace metals can interact with other compounds in food and cause several food spoilage reactions.

The function of Solvitar

The reaction of trace metal ions with both organic and inorganic components can be retarded or prevented by the addition of Solvitar which will promote colour retention, texture retention, product clarity and act as an anti-gushing agent. It will prevent flavor loss, discoloration and texture changes.

Furthermore Solvitar can control oxidation catalyzed by trace heavy metal ions and act as a 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 the food product dramatically. In fat based products dangerous aldehydes are formed by the chain reaction leading to rancidity.

To prevent oxidation of food and beverages, all trace metals need to be captured by Solvitar. Once the metal ions are sequestered, only limited amounts of anti-oxidant need to be added to prevent oxidation completely.

Otherwise known as Calcium Disodium EDTA, Solvitar has been proven to be more effective than other type of chelating agents in stabilizing food and beverages.

Application examples



Sauces and margarines

Many processed food products can suffer from spoilage reactions caused by trace metal ions. In fat-based products, like emulsified sauces and margarine, trace metal ions act as catalysts in the oxidation reaction of the fats and lead to rancidity. Especially poly-unsaturated fatty acids, like Omega-3, are highly sensitive for oxidation reactions and can be stabilized by the addition of Solvitar.



Vegetables

Enzymatic browning of vegetables like mushrooms and artichokes is catalyzed by trace metal ions. In canned legumes and corn, discoloration is caused by the reaction of trace metal ions with organic components in the vegetables. Iron ions 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.



Fish and shellfish

Fish and shellfish products naturally contain high concentrations of metals. In combination with organic components in the seafood itself, this can cause off-flavors, bad odors, rancidity and discoloration.



Soft drinks

In soft drinks, the addition of Solvitar can support vitamin C stabilization and minimize colour fading and flavour loss. In beer, Solvitar reduces gushing and promotes clarity.



Nouryon

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[solvitar.com](https://www.solvitar.com)

We are a global specialty chemicals leader. Industries worldwide rely on our essential chemistry in the manufacture of everyday products such as paper, plastics, building materials, food, pharmaceuticals, and personal care items. Building on our nearly 400-year history, the dedication of our 10,000 employees, and our shared commitment to business growth, strong financial performance, safety, sustainability, and innovation, we have established a world-class business and built strong partnerships with our customers. We operate in over 80 countries around the world and our portfolio of industry-leading brands includes Eka, Dissolvine, Trigonox, and Berol.