DSM

Product safety summary

Sodium Ascorbate

CAS number
134-03-2

Chemical formula
$C_6H_7NaO_6$

Introduction
DSM Nutritional Products, a Business Group of Royal DSM N.V., is a global leader in producing Sodium Ascorbate.

What is Sodium Ascorbate?
Vitamins are naturally occurring compounds present in most foods and feedstuffs. The human body and most animal species cannot produce vitamins and therefore have to acquire them from external sources through the diet. Vitamins are essential for all body functions including growth and repair of tissues. Vitamin C or Ascorbic Acid is one of these essential vitamins. Sodium Ascorbate is a derivative of Vitamin C

Use, storage and transport of Sodium Ascorbate
Use:
Sodium Ascorbate is a form of Vitamin C that is specifically formulated for uses such as: fortification of foods, as a preservative for stabilization of foods, as an ingredient for dietary supplements or pharmaceutical products.

Storage:
Sodium Ascorbate is somewhat sensitive to air, heat and humidity. The “best use before” date is printed on the label.

Transportation:
Sodium Ascorbate is not regulated as a hazardous material by any of the global transportation regulations.

Physical/chemical properties
Sodium Ascorbate is an odorless powder that is white to pale yellow. Sodium Ascorbate is soluble in water with a pH of 7.0 – 8.0. Although Sodium Ascorbate is a mostly organic powder it has a low potential for a dust explosion. See MSDS for more information.

Health information
Sodium Ascorbate is used as a food additive, food preservative and in dietary supplements. It is a form of Vitamin C. Our bodies use vitamins everyday during the normal biochemical processes that maintain life. Vitamins help release energy from our food and support growth, healing and repair. An ongoing shortage of vitamins in our diet will lead to failed health, weakness and susceptibility to disease.

The health benefits of Sodium Ascorbate or Vitamin C may include protection against immune system deficiencies, cardiovascular disease, prenatal health problems and eye disease. Vitamin C has a role in skin health and has antioxidant activity.

The key health effects after repeated or prolonged occupational exposure to the raw bulk Sodium Ascorbate is skin and eye irritation, and may also cause mucous membranes irritation.

Environmental information
Sodium Ascorbate is biodegradable and not toxic to fish.

Exposure potential

- **Workplace exposure**
  Sodium Ascorbate contains no substances with occupational exposure limit values. Normally, Sodium Ascorbate is handled in closed systems with very little exposure. When exposure is possible e.g. when packaging Sodium Ascorbate, workers use personal protective equipment (PPE) such as dust masks.
- **Consumer Exposure**
  Consumers are not exposed to Sodium Ascorbate in significant levels. The consumer typically is exposed to Sodium Ascorbate via food additives, food preservatives or dietary supplements.
- **Environmental Releases**
  Sodium Ascorbate is non-toxic and non-hazardous. Cleanup of Sodium Ascorbate Powder is through normal disposal routes in compliance with local, state and federal regulations.

Risk management
Worker exposure risks are either designed out such as using a closed system or if exposure is present the workers wear correct PPE, e.g. dust masks, chemical goggles, gloves. Pure Sodium Ascorbate is a powder and as such presents a low level combustible dust explosion hazard. This is controlled by detailed evaluation of explosion potential and design of equipment to ensure a safe system of work.

Consumer food products contain low levels of Sodium Ascorbate. Consumers are not exposed to significant amounts of Sodium Ascorbate. Significant exposure to the general public is only through a transportation incident involving pure Sodium Ascorbate. This is controlled via emergency response procedures for transportation incidents.

Sodium Ascorbate should only be handled by knowledgeable, well-trained personnel who thoroughly understand the hazards associated with the transportation, storage and use of the chemical.

Contact information
For further information on Sodium Ascorbate or product safety summaries in general, please contact: info.gps@dsm.com

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