

Product Safety Summary

Sodium Sulfite (CAS No. 7757-83-7)

This Product Safety Summary is intended to provide a general overview of the chemical substance. The information on the summary is basic information and is not intended to provide emergency response information, medical information or treatment information. The summary should not be used to provide in-depth safety and health information. In-depth safety and health information can be found on the Material Safety Data Sheet (MSDS) for the chemical substance.

Names

- Sodium sulfite (sulphite), anhydrous
- Hypo (photographic uses)
- Sulfurous acid sodium salt
- Disodium sulfite

Product Overview

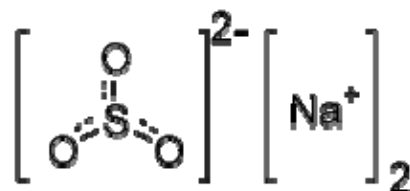
Sodium sulfite is a white, granular or powdered solid. It is used in the pulp and paper industry, in the photographic industry to keep developer solutions from oxidizing and to wash fixer from film and photo-paper, in the textile industry as a bleach, desulfurizer or dechlorinator and in the tanning of leather, for example. Sulfites may be used as a food preservative or in the making of dyes. Sulfites can also be used in the manufacture of other chemicals.

Solvay Chemicals, Inc. does not sell sodium sulfite directly to consumers. Consumers may be exposed to sodium sulfite in many of the consumer product applications listed above or in situations where the sodium sulfite is not transformed or reacted.

Exposure to sodium sulfite, especially powder, can cause irritation to the skin, eyes, and respiratory tract. If inhaled, sulfites may cause sensitization (develop an allergic reaction). Breathing sulfite dusts may aggravate asthma or other pulmonary (breathing) diseases and may cause headaches, breathing difficulties, or heart irregularity. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Overexposure may result in death.

Manufacture of Product

- Solvay Chemicals, Inc.'s production facility is located near Green River, Wyoming.
- Solvay Chemicals, Inc. manufactures sodium sulfite by reacting sulfur dioxide with sodium carbonate (soda ash), purifying and drying to form crystals or powder.



Na_2SO_3
Sodium Sulfite

Product Description

Sodium sulfite (Na_2SO_3) is manufactured and sold as a white, odorless powder or granules. Typical physical properties are provided in Table 1.

Table 1: Typical physical properties of Sodium Sulfite

Decomposition Temperature	> 1112° F (600° C)
Bulk Density	95-100 lbs/ft ³ (1.5-1.6 kg/m ³)
Flash point	Non- flammable
Solubility in water	250 g/L @ 68° F (20° C)
pH	9.6 - 9.8 10 g/L

Product Uses

Sodium sulfite is used in many industries; for example, the pulp and paper industry, in the photographic industry to keep developer solutions from oxidizing and to wash fixer (sodium

thiosulfate) from film and photo-paper, in the textile industry as a bleach, desulfurizer or dechlorinator and in the tanning of leather. Sulfites may be used as a food preservative or in the making of dyes. Sulfites are used in the manufacture of other chemicals.

Exposure Potential

- **Workplace exposure** - Exposures can occur at a sodium sulfite manufacturing facility or a manufacturing, packaging or storage facility that handles sodium sulfite. Exposure may also occur in the event of a transportation incident. Persons involved in maintenance, sampling and testing activities, or in the loading and unloading of sodium sulfite containers are at greater risk of exposure. Following good industrial hygiene practices will minimize the likelihood of sodium sulfite exposure; however, persons involved in higher risk activities should always wear proper personal protective equipment such as protective gloves and goggles. In instances where the potential for dusting is high, proper respiratory protection should also be worn.
- **Consumer exposure to products containing sodium sulfite** - Although Solvay Chemicals, Inc. does not sell sodium sulfite directly to consumers, some of its uses are in consumer products such as photographic processing solutions or food preservation. Sodium sulfite is Generally Recognized As Safe (GRAS) in authorized uses in foods. The user should always use these products in strict compliance with the manufacturer's use and/or label instructions. Persons sensitive to sulfites should be careful when eating in an unfamiliar establishment.
- **Environmental releases** - Spills of sodium sulfite should be contained and isolated from waterways and sewers or drains. Spills should be swept up and placed in a compatible container. Dispose of waste or residues in accordance with applicable local, state or federal regulations. Persons attempting to clean up sodium sulfite spills should wear proper personal protective equipment (See guidelines in the Workplace exposure section of this document or the [Material Safety Data Sheet](#)).
- **Fires** – Sodium sulfite is not flammable or combustible. Fires that occur in the presence of sodium sulfite should be extinguished using means appropriate to the surroundings. When sodium sulfite decomposes (at very high temperatures), it liberates toxic sulfur dioxide and sulfur oxides.

For additional information concerning sodium sulfite emergency response procedures, please consult the [Material Safety Data Sheet](#).



Health Information

Sodium sulfite typically found in consumer products should pose little risk due to skin or inhalation exposure since sodium sulfite is used in very low concentrations. Sodium sulfite can produce the following adverse health effects:

- **Contact** - Skin exposures can cause symptoms ranging from minor skin irritation or itching to redness and swelling. Eye exposure to sodium sulfite may result in redness, tearing or moderate eye irritation.
- **Inhalation** - The inhalation of sodium sulfite dusts can cause nose and throat irritation or coughing. Repeated or prolonged exposures may cause sore throat or nosebleeds. Inhalation may also cause severe respiratory reactions and aggravate asthma or other breathing diseases.
- **Ingestion** - The ingestion of sodium sulfite may cause irritation of the mouth and throat, nausea, vomiting and diarrhea. Overexposure may result in death.
- **Other Effects** - The International Agency for Research on Cancer (IARC) has not classified sodium sulfite as a carcinogen (cancer causing).

For more information on health effects and routes of exposure, or for information concerning proper first aid measures, please consult the [Material Safety Data Sheet](#).

Environmental Information

Sodium sulfite is not considered to be environmentally hazardous or toxic.

For more ecological and environmental information concerning this product, please consult the [Material Safety Data Sheet](#).

Physical Hazard Information

For more information concerning the physical hazards of this product, please consult the [Material Safety Data Sheet](#).

Regulatory Information

Regulations may exist that govern the manufacture, sale, transportation, use and/or disposal of this chemical. These regulations can vary by city, state, country or geographic region. Information may be found by consulting the relevant [Material Safety Data Sheet](#) specific to your country or region.



Additional Information

- Solvay America, Inc. www.solvaynorthamerica.com
- Solvay Chemicals, Inc. www.solvaychemicals.us
- Solvay Chemicals, Inc. Material Safety Data Sheets
www.solvaychemicals.us/EN/Literature/LiteratureDocuments.aspx
- Contact Solvay Chemicals, Inc. solvaychemicals.us@solvay.com
- This summary was prepared in May, 2011.

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