

## Product Safety Summary

### Sodium Sulfite Blends

#### Sodium Sulfite - Catalyzed

#### Sodium Sulfite – Catalyzed & Decharacterized

containing > 90% sodium sulfite (CAS No. 7757-83-7)

This Product Safety Summary is intended to provide a general overview of the chemical substance. The information in 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 blend
- Disodium sulfite blend
- Sulfurous acid, sodium salt blend

### Product Overview

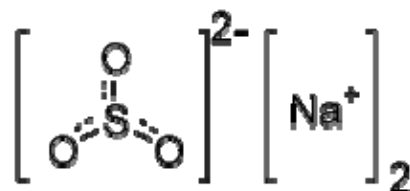
Sodium sulfite blends are slightly colored and used in water treatment as an oxygen scavenger and 'down-hole' in drilling muds for well excavation.

Solvay Chemicals, Inc. does not sell sodium sulfite blends directly to consumers. Consumers will not be exposed to sodium sulfite in any consumer product applications.

Exposure to sodium sulfite blend powder can cause irritation to the skin, eyes, and respiratory tract. If inhaled, sulfite blend materials may cause sensitization (develop an allergic reaction). Breathing sulfite blend 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.



$\text{Na}_2\text{SO}_3$   
Sodium Sulfite

Solvay then adds additional materials to make the specific individual blends.

## Product Description

Sodium sulfite blends are manufactured and sold as a slightly colored powder. Typical physical properties are provided in Table 1.

Sodium sulfite blends are mixtures of (>90%) sodium sulfite and other compounds specifically formulated to remove oxygen from boilers and other water service components.

Table 1: Typical physical properties of Sodium sulfite blend

<b>Decomposition Temperature</b>	> 300 -1112° F (150 - 600° C)
<b>Bulk Density</b>	95-98 lbs/ft <sup>3</sup> (1.5-1.55 kg/m <sup>3</sup> )
<b>Flash point</b>	Non- flammable
<b>pH</b>	8.0-8.4 10 g/l

## Product Uses

Sodium sulfite blends are used in water treatment as an oxygen scavenger and 'down-hole' in drilling muds for well excavation. When sodium sulfite blends contact water, they may liberate toxic sulfur dioxide gas.

## Exposure Potential

- **Workplace exposure** - Exposures can occur at a sodium sulfite blend manufacturing facility or a manufacturing, packaging or storage facility that handles sodium sulfite blends. 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 blend containers are at greater risk of exposure. Following good industrial hygiene practices will minimize the likelihood of sodium sulfite blend 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** - Solvay Chemicals, Inc. does not sell sodium sulfite blends directly to consumers. The user should always use these products in strict compliance with the manufacturer's use and/or label instructions.
- **Environmental releases** - Spills of sodium sulfite blends 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 blend 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 blends are not flammable or combustible. Fires that occur in the presence of sodium sulfite blends should be extinguished using means appropriate to the surroundings. When sodium sulfite decomposes (at very high temperatures) or contacts water, it liberates toxic sulfur dioxide and sulfur oxides.

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

## Health Information

Sodium sulfite blends are not typically found in consumer products. Sodium sulfite blends 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 blends may result in redness, tearing or moderate eye irritation.
- **Inhalation** - The inhalation of sodium sulfite blend 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 blends 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). However, one of the components of both Solvay Chemicals' sodium sulfite blends, cobalt sulfate monohydrate, which is present in very low levels (<0.1%), has been classified as a carcinogen.

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 blends are 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](http://www.solvaynorthamerica.com)
- Solvay Chemicals, Inc. [www.solvaychemicals.us](http://www.solvaychemicals.us)
- Solvay Chemicals, Inc. Material Safety Data Sheets  
[www.solvaychemicals.us/EN/Literature/LiteratureDocuments.aspx](http://www.solvaychemicals.us/EN/Literature/LiteratureDocuments.aspx)
- Contact Solvay Chemicals, Inc. [solvaychemicals.us@solvay.com](mailto:solvaychemicals.us@solvay.com)
- This summary was prepared in June, 2011.

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