



## Material Safety Data Sheet

Creation Date 08-Feb-2010

Revision Date 08-Feb-2010

Revision Number 1

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	<b>Sodium metabisulfite</b>
<b>Cat No.</b>	<b>S242-12; S242-212; S242-400LB; S242-500; S243-10; S244-3; S244-500</b>
<b>Synonyms</b>	Sodium pyrosulfite; Disodium pyrosulfite; Disodium Disulfite (Granular/Powder/NF/FCC/Laboratory/Certified ACS)
<b>Recommended Use</b>	Laboratory chemicals
<b>Company</b>	<b>Emergency Telephone Number</b>
Fisher Scientific	CHEMTREC®, Inside the USA: 800-
One Reagent Lane	424-9300
Fair Lawn, NJ 07410	CHEMTREC®, Outside the USA: 703-
Tel: (201) 796-7100	527-3887

### 2. HAZARDS IDENTIFICATION

#### WARNING!

#### Emergency Overview

Harmful if swallowed. Risk of serious damage to eyes. May cause skin and respiratory tract irritation. Contact with acids liberates toxic gas.

**Appearance** Off-white

**Physical State** Powder

**odor** rotten-egg like

**Target Organs** Eyes, Central nervous system (CNS), Liver, Kidney

#### Potential Health Effects

##### Acute Effects

##### Principle Routes of Exposure

###### Eyes

Risk of serious damage to eyes.

###### Skin

May cause irritation. May be harmful in contact with skin.

###### Inhalation

May cause irritation of respiratory tract. May be harmful if inhaled.

###### Ingestion

Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

##### Chronic Effects

Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse liver effects. May cause adverse kidney effects.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions**      Preexisting eye disorders. Skin disorders.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Haz/Non-haz**

Component	CAS-No	Weight %
Sodium metabisulfite	7681-57-4	97

**4. FIRST AID MEASURES**

**Eye Contact**                                      Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact**                                      Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

**Inhalation**                                        Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Get medical attention immediately if symptoms occur.

**Ingestion**                                         Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Notes to Physician**                            Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Flash Point**                                        Not applicable  
**Method**    No information available.

**Autoignition Temperature**                    No information available.

**Explosion Limits**                                No data available  
**Upper**    No data available  
**Lower**    No data available

**Suitable Extinguishing Media**                Substance is nonflammable; use agent most appropriate to extinguish surrounding fire..

**Unsuitable Extinguishing Media**             No information available.

**Hazardous Combustion Products**            No information available.

**Sensitivity to mechanical impact**            No information available.  
**Sensitivity to static discharge**              No information available.

**Specific Hazards Arising from the Chemical**  
 Thermal decomposition can lead to release of irritating gases and vapors.

**Protective Equipment and Precautions for Firefighters**  
 As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**NFPA**    **Health 2**    **Flammability 0**    **Instability 1**    **Physical hazards N/A**

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

**Environmental Precautions** Should not be released into the environment.

**Methods for Containment and Clean Up** Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

**7. HANDLING AND STORAGE**

**Handling** Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Keep away from acids.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near acids.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium metabisulfite	TWA: 5 mg/m <sup>3</sup>	(Vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWA EV
Sodium metabisulfite	TWA: 5 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup>

*NIOSH IDLH: Immediately Dangerous to Life or Health*

**Personal Protective Equipment**

**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Powder
<b>Appearance</b>	Off-white
<b>odor</b>	rotten-egg like
<b>Odor Threshold</b>	No information available.
<b>pH</b>	4-6 5% aq.sol.
<b>Vapor Pressure</b>	No information available.
<b>Vapor Density</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Boiling Point/Range</b>	No information available.
<b>Melting Point/Range</b>	150°C / 302°F
<b>Decomposition temperature °C</b>	120 °C

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	No information available.
<b>Specific Gravity</b>	1.4
<b>Solubility</b>	Soluble in water
<b>log Pow</b>	No data available
<b>Molecular Weight</b>	190.1
<b>Molecular Formula</b>	Na <sub>2</sub> O <sub>5</sub> S <sub>2</sub>

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Air sensitive. Moisture sensitive.
<b>Conditions to Avoid</b>	Avoid dust formation. Incompatible products. Excess heat. Exposure to air or moisture over prolonged periods.
<b>Incompatible Materials</b>	Acids, Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Sodium oxides, Sulfur oxides
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur
<b>Hazardous Reactions .</b>	Contact with acids liberates toxic gas.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium metabisulfite	1131 mg/kg ( Rat )	2 g/kg ( Rat )	Not listed

<b>Irritation</b>	Severe eye irritant
<b>Toxicologically Synergistic Products</b>	No information available.
<b>Chronic Toxicity</b>	
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product
<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	Mutagenic effects have occurred in experimental animals.
<b>Reproductive Effects</b>	Experiments have shown reproductive toxicity effects on laboratory animals.
<b>Developmental Effects</b>	No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** The toxicological properties have not been fully investigated.. See actual entry in RTECS for complete information.

**Endocrine Disruptor Information** No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium metabisulfite	EC50 72 h 48 mg/L EC50 96 h 40 mg/L EC50 72 h 48 mg/L	Not listed	EC50 = 56 mg/L 17 h	EC50 24 h 89 mg/L

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available

### Mobility

Component	log Pow
Sodium metabisulfite	-3.7

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

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**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Sodium metabisulfite	X	X	-	231-673-0	-		X	X	X	X	KE-12701 X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313**

Not applicable

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act**

Not applicable

**Clean Air Act**

Not applicable

**OSHA**

Not applicable

**CERCLA**

Not Applicable

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium metabisulfite	X	X	X	-	X

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

Non-controlled

**16. OTHER INFORMATION**

**Prepared By** Regulatory Affairs  
Thermo Fisher Scientific  
Tel: (412) 490-8929

**Creation Date** 08-Feb-2010

**Print Date** 08-Feb-2010

**Revision Summary** "\*\*\*\*", and red text indicates revision

**Disclaimer**

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**End of MSDS**