



# SAFETY DATA SHEET

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## DECHARACTERIZED SODIUM SULFITE

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Decharacterized Sodium Sulfite

**OTHER/GENERIC NAMES:** Sodium Sulfite, Catalyzed, Decharacterized

**PRODUCT USE AND RESTRICTIONS ON USE:** Water treatment - oxygen removal.

**SUPPLIER:** Esseco USA LLC  
Gatehall IV  
4 Gatehall Drive  
Parsippany, NJ 07054

**FOR MORE INFORMATION CALL:** 973-267-3330  
(Monday-Friday, 9:00am-4:30pm)

**FOR EMERGENCY IN USA, CALL CHEMTREC:** 800-424-9300  
(24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Eye Damage Category 1  
Respiratory Sensitizer Category 1B  
Skin Sensitizer Category 1  
Germ Cell Mutagen Category 2  
Carcinogen Category 1B  
Reproductive Toxicity Category 1B

#### Label Elements:



#### DANGER!

Causes serious eye damage.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause allergic skin reaction.  
Suspected of causing genetic defects.  
May cause cancer.  
May damage fertility.

Obtain special instructions before use.



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Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust.  
Wear respiratory protection.  
Wear protective gloves, protective clothing, eye protection, and face protection.  
Contaminated work clothing should not be allowed out of the workplace.  
IF INHALED: remove person to fresh air and keep comfortable for breathing.  
If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor.  
IF ON SKIN: Wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice or attention.  
Take off contaminated clothing and wash it before reuse.  
IF exposed or concerned: Get medical advice or attention.  
Store locked up.  
Dispose of contents and container in accordance with locals, state, and federal regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Sodium sulfite	7757-83-7	92+
Lignosulfonic acid, sodium salt	8061-51-6	<6
Sodium metabisulfite	7681-57-4	<5
Cobalt sulfate	10124-43-3	<0.2

Trace impurities and additional material names not listed above may appear in Section 15 of this SDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons. The exact concentrations are a trade secret.

### 4. FIRST AID MEASURES

- SKIN:** Immediately wash skin with plenty of soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation or rash occurs.
- EYES:** Flush eyes immediately with water for at least 15 minutes. Remove contact lenses if present after the first 5 minutes if you can do so easily and continue flushing. Get immediate medical attention.
- INHALATION:** Promptly remove to fresh air. Get immediate medical attention if signs of suffocation, irritation or other symptoms develop.
- INGESTION:** If conscious, immediately rinse mouth with water and give 1 glass of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.
- MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:** May cause irritation and/or burns to the eyes. Harmful if swallowed or inhaled. May cause severe and possibly fatal allergic reactions if inhaled or swallowed by some asthmatics and other 'sulfite-sensitive' individuals. May cause respiratory sensitization with asthma. May cause allergic skin reaction with rash and itching. May cause genetic defects, damage to fertility, or cancer. Reacts with acids to form toxic and irritating sulfur dioxide gas.



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**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:** Get immediate medical attention for eye contact. Treat symptomatically. Note potential for anaphylactic shock with allergic individuals.

### 5. FIRE FIGHTING MEASURES

**SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA:**

Material is not flammable. Use extinguishing media appropriate for material in surrounding fire.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:**

Releases toxic and irritating sulfur oxides at fire temperatures.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTING:**

Wear NIOSH-approved self-contained breathing apparatus. Use water-spray to keep containers cool, and to knock down vapors or gases.

### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:** Provide ventilation to clear sulfur dioxide fumes which may be generated by the sodium sulfite component. Wear appropriate personal protective equipment.

**ENVIRONMENTAL PRECAUTIONS:** Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Promptly sweep up material with minimum dusting and shovel into an empty container with a cover. Rinse spill area with plenty of water.

### 7. HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** (See section 8 for recommended personal protective equipment.)

Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not eat or drink in the work area. Use normal personal hygiene and housekeeping. Keep away from acids and oxidizing agents.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

Store in a cool, dry, well-ventilated area away from acids and oxidizing agents.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**EXPOSURE GUIDELINES**

<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
Sodium sulfite	None	None	None
Lignosulfonic acid, sodium salt	None	None	None
Sodium metabisulfite	5 mg/m <sup>3</sup> TWA	None	None
Cobalt Sulfate (as Co)	0.02 mg/m <sup>3</sup> TWA	0.1 mg/m <sup>3</sup> TWA (for metal dust and fume)	None

**OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:**

Sulfur dioxide: OSHA TWA = 5 ppm  
ACGIH STEL = 0.25 ppm



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### APPROPRIATE ENGINEERING CONTROLS:

Local exhaust if dusty conditions exist or if there is a release of sulfur dioxide gas. Do not use in unventilated spaces.

### INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

**SKIN PROTECTION:** For handling dry material, wear rubber gloves and full work clothing, including long-sleeved shirt and trousers. When handling solutions and there is prolonged or repeated contact, wear impervious gloves, clothing and boots.

**EYE PROTECTION:** Wear chemical safety goggles.

**RESPIRATORY PROTECTION:** Where required, use a NIOSH-approved respirator for dust, mist and/or sulfur dioxide gas, as conditions indicate. Some exposures may require a NIOSH-approved self-contained breathing apparatus or supplied-air respirator. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice.

**ADDITIONAL RECOMMENDATIONS:** Eyewash and safety shower are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White crystals or powder.	
PHYSICAL STATE:	Solid.	
ODOR:	Odorless.	
ODOR THRESHOLD:	Not determined.	
MOLECULAR WEIGHT:	Sodium sulfite - 126.04.	
CHEMICAL FORMULA:	Sodium sulfite - Na <sub>2</sub> SO <sub>3</sub>	
RELATIVE DENSITY (water = 1.0):	2.63	
SOLUBILITY IN WATER (weight %):	17% at 50°F; 28% at 92°F	
pH:	5% solution - 9.8	
INITIAL BOILING POINT/RANGE:	Not applicable.	
MELTING/FREEZING POINT:	Decomposes at 1652°F	
VAPOR PRESSURE:	Not applicable.	
VAPOR DENSITY (air = 1.0):	Not applicable.	
EVAPORATION RATE:	Not applicable.	COMPARED TO: Not applicable.
% VOLATILES:	Not applicable.	
PARTITION COEFFICIENT (N-OCTANOL/WATER):	Not determined.	
VISCOSITY:	Not applicable.	
FLASH POINT:	Not flammable.	
FLASH POINT METHOD:	Not applicable.	
AUTOIGNITION TEMPERATURE:	Not applicable.	
UPPER FLAME LIMIT (volume % in air):	Not applicable.	
LOWER FLAME LIMIT (volume % in air):	Not applicable.	
DECOMPOSITION TEMPERATURE:	Not determined.	
FLAMMABILITY (SOLID, GAS)	Not flammable.	
OSHA FLAMMABILITY CLASS:	Not applicable.	



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### 10. STABILITY AND REACTIVITY

**REACTIVITY:**

Not normally reactive

**CHEMICAL STABILITY:**

Normally stable.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

Reacts with acids to form toxic and irritating sulfur dioxide gas.

**CONDITIONS TO AVOID:**

Avoid high temperatures (at decomposition, 1652°F); yields sulfur dioxide gas and hazardous residue.

**INCOMPATIBILITIES:**

Strong oxidizers: causes vigorous exothermic reactions.

Acids: releases sulfur dioxide gas.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Sulfur dioxide and sodium sulfide residue. Sodium sulfide is flammable, a dangerous fire risk, a strong irritant to skin and tissue, and is incompatible with acids.

### 11. TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH HAZARDS

**ACUTE EFFECTS OF EXPOSURE:**

**SKIN:** Dust or mist may cause skin irritation from prolonged contact. Solutions will cause skin irritation. May cause allergic skin reaction (sensitization) with rash and itching.

**EYES:** Dust or mist may irritate or burn the eyes. Solutions will cause irritation or burns to the eyes.

**INHALATION:** Inhalation of dust or mist can irritate the respiratory tract. May cause respiratory sensitization. May cause severe or deadly allergic reactions in some asthmatics and sulfite sensitive individuals. Possible signs and symptoms of allergic reactions include bronchoconstriction, sweating, flushing, hives, rapid heart rate, decreased blood pressure, and anaphylaxis.

**INGESTION:** Ingestion may irritate the gastrointestinal tract. Estimated to be moderately toxic. May cause severe allergic reactions in some asthmatics. Large doses may cause violent colic and diarrhea, circulatory disturbances, central nervous system depression, and even death.

**CHRONIC EFFECTS:** None known.

Ingredients found on one of the three OSHA designated carcinogen lists are listed below.

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
Cobalt Sulfate	Reasonably Anticipated to be a Carcinogen	2B	No



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### NUMERICAL MEASURES OF TOXICITY:

#### Immediate (Acute) Effects:

Sodium sulfite - LD<sub>50</sub> (oral, mouse) = 820 mg/kg, LD<sub>50</sub> (oral, rat) = 2610-6400 mg/kg; LC<sub>50</sub> (inhalation, rat) >5.5 mg/L/4 hr.; LC<sub>50</sub> (inhalation, rat) >22 mg/L/1 hr.  
Sodium metabisulfite - LD<sub>50</sub> (oral, rat) = 1131 - 3200 mg/kg

#### Delayed (Subchronic and Chronic) Effects:

Sodium sulfite has been demonstrated to be mutagenic in microbial systems; however, it is not mutagenic in studies involving insects and is not considered to present a mutagenic threat to multicell organisms. Cobalt sulfate is suspected of causing genetic defects based on read-across from similar cobalt containing compounds that have shown evidence for genetic effects in in vivo and in vitro studies. Cobalt sulfate is classified as toxic to reproduction due to read across from similar cobalt containing compounds.

#### Other Data:

None

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY:

The following ecotoxicity data is available for Sodium sulfite:

Daphnia magna LC50 48 hrs	440 mg/L
Western Mosquitofish 96hrs LC50	460 mg/L
Biological Oxygen Demand (BOD)	0.12 lb/lb, instantaneous

The following ecotoxicity data is available for Sodium metabisulfite:

Daphnia EC50 48 hrs	89 mg/L
Fish LC50 96hrs	32 mg/L
Algae EC50 72 hrs	48 mg/L

### PERSISTENCE AND DEGRADABILITY:

No data available.

### BIOACCUMULATIVE POTENTIAL:

No data available.

### MOBILITY IN SOIL:

No data available.

### OTHER ADVERSE EFFECTS:

No data available.

## 13. DISPOSAL CONSIDERATIONS

### RCRA

Is the unused product a RCRA hazardous waste if discarded? No

If yes, the RCRA ID number is: Not applicable.



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### OTHER DISPOSAL CONSIDERATIONS:

Dispose of in accordance with applicable Federal, State and Local regulations.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

### 14. TRANSPORT INFORMATION

US DOT HAZARD CLASS: Not regulated.  
US DOT ID NUMBER: Not applicable.  
PROPER SHIPPING NAME: Not applicable.

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

### 15. REGULATORY INFORMATION

#### TOXIC SUBSTANCES CONTROL ACT (TSCA)

TSCA INVENTORY STATUS: All components are listed on TSCA Inventory of Chemical Substances.  
OTHER TSCA ISSUES: None.

#### SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

<u>INGREDIENT NAME</u>	<u>SARA/CERCLA RQ (lb)</u>	<u>SARA EHS TPQ (lb)</u>
No ingredients listed in this section.	----	----

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee. Many states have more stringent regulations. Report all spills in accordance with local, state and federal regulations.

SECTION 311 HAZARD CLASS: Acute Health, Chronic Health

#### SARA 313 TOXIC CHEMICALS:

The following ingredients are SARA 313 "Toxic Chemicals" and may be subject to annual reporting requirements. CAS numbers and weight percents are found in Section 2.

<u>INGREDIENT NAME</u>	<u>COMMENT</u>
Cobalt sulfate (cobalt compounds)	<0.2%

#### STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

<u>INGREDIENT NAME</u>	<u>WEIGHT %</u>	<u>COMMENT</u>
No ingredients listed in this section.	----	----





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### CALIFORNIA PROPOSITION 65

This product contains cobalt sulfate which is known to the State of California to cause cancer.

### ADDITIONAL REGULATORY INFORMATION:

None

### WHMIS CLASSIFICATION (CANADA):

D2A

### FOREIGN CHEMICAL CONTROL INVENTORY STATUS:

Listed on Canadian DSL, Australian AICS, Phillipines PICCS, Chinese IECSC, Japanese MITI, Korean KECL, and EU EINECS.

## 16. OTHER INFORMATION

CURRENT ISSUE DATE: December, 2013

PREVIOUS ISSUE DATE: October, 2010

### CHANGES TO SDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:

Updated format for HazCom 2012.

OTHER INFORMATION: None.

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