Catalog number 03-0165

PHOTOGRAPHERS' FORMULARY INC.

PO Box 950 • Condon MT 59826 • 406-754-2891 • FAX 406-754-2896
E-MAIL formulary @montana.com
www.photoformulary.com

# FORMULARY HYPO CLEAR AGENT

**To make 1 liter of Stock Solution**

Removing fixer from film and paper is the most important step in archival processing. Formulary Hypo Clear Agent aids in the removal of the thiosulfate ions which are found in all photo-graphic fixers. Thiosulfate ions are very difficult to remove from either paper or film by a simple wash. However, when paper or film is soaked in Hypo Clear Agent, the thiosulfate ions are replaced by sulfite ions by a process called ion exchange. The sulfite ions are easily removed by a water wash. Washing after the use of Hypo Clear is imperative.

## CHEMICAL SAFETY

All chemicals are dangerous and must be treated with respect. Please read the warning on each package.
None of the chemicals used in mixing Formulary Hypo Clear Agent need special attention.
The user assumes all risks upon accepting these chemicals. IF FOR ANY REASON YOU DO NOT WISH TO ASSUME ALL RISKS, PLEASE RETURN THE CHEMICALS FOR A FULL REFUND.

## MIXING THE SOLUTION

A stock solution is first prepared for convenience of storage. The working solution is prepared by dilution of the stock solution as needed.

## STOCK SOLUTION

**FOR BEST RESULTS USE DISTILLED WATER**

To mix and store the stock solution, you will need a 1-liter mixing bowl and container. You will also need a graduated cylinder or other volume-measuring device.

| CHEMICAL | AMOUNT |
|---|---|
| Warm Water (125°F/52°C) | 750 ml |
| Sodium Sulfite | 200 g |
| Sodium Bisulfite | 2 g |
| Cold Water To Make | 1000 ml |



Place the warm water in the mixing container and add sodium sulfite. Stir or swirl the solution to dissolve the sulfite. Next, add the sodium bisulfite to the container and again stir or swirl the solution until the solid has dissolved. Finally, add cold water to bring the total volume in the container up to 1000 ml.

## WORKING SOLUTION

Dilute 1 part of the stock solution with 9 parts of water to make the working solution. For example to prepare 1 liter of working solution add 100 ml of the stock solution to 900 ml of water. Be sure to stir the final solution after mixing.

## CAPACITY OF THE WORKING SOLUTION

The capacity of the Hypo Clear Agent (with pre-wash) is 50 8x10 sheets of paper, or 30 to 40 rolls of film (80 Square inches) per liter of working solution.

## USING HYPO CLEAR AGENT

The following chart shows the recommended times for the pre-wash*, Hypo Clear, and the final wash for paper and films at 18.5-21°C/65-70°F.

| Paper or Film | Pre-Wash with Water | Hypo-Clear with Water | Final wash with Running Water |
|---|---|---|---|
| Single Weight Paper | 1 min | 2 min | 10 min |
| Double Weight Paper | 1 min | 3 min | 20 min |
| Film | 30 sec | 1-2 min | 5 min |

The pre-wash is not mandatory but with its use the capacity of the Hypo Clear Agent will increase by 2.5 times.

PHOTOGRAPHERS' FORMULARY INC.

PO Box 950 • Condon MT 59826 • 406-754-2891 • FAX 406-754-2896
E-MAIL formulary @montana.com

Fisher Scientific

Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

**Creation Date** 14-May-2010 **Revision Date** 05-Feb-2016 **Revision Number** 2

## 1. Identification

**Product Name** **Sodium bisulfite**

**Cat No. :** **S6543; S654500**

**Synonyms** Sodium hydrogen sulfite

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Emergency Telephone Number**
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Acute oral toxicity | Category 4 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system. | |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Harmful if swallowed
May cause respiratory irritation

**Precautionary Statements**
**Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

**Storage**

Store in a well-ventilated place. Keep container tightly closed
Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Contact with acids liberates toxic gas

**Other hazards**

May produce an allergic reaction. May cause eye, skin, and respiratory tract irritation.

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Sodium bisulfite | 7631-90-5 | 100 |

## 4. First-aid measures

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

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

**Ingestion** Do not induce vomiting. Get medical attention.

**Most important symptoms/effects** May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available

**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Sulfur oxides Sodium oxides
**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 | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 0 | 2 | N/A |

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid dust formation.

**Environmental Precautions** See Section 12 for additional ecological information.

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

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Use only in area provided with appropriate exhaust ventilation. Handle under inert gas, protect from moisture. Wear personal protective equipment. Avoid dust formation.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from acids.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Sodium bisulfite | TWA: 5 mg/m³ | (Vacated) TWA: 5 mg/m³ | TWA: 5 mg/m³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|---|---|---|---|
| Sodium bisulfite | TWA: 5 mg/m³ | | TWA: 5 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

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

**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.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | White |
| **Odor** | rotten-egg like |
| **Odor Threshold** | No information available |
| **pH** | 4-5 25% aq. sol |
| **Melting Point/Range** | 150 °C / 302 °F |
| **Boiling Point/Range** | No information available |
| **Flash Point** | No information available |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | Not applicable |
| **Specific Gravity** | 1.480 |
| **Solubility** | 300 g/l |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | Not applicable |
| **Molecular Formula** | H Na O3 S |
| **Molecular Weight** | 104.06 |

## 10. Stability and reactivity

**Reactive Hazard** Yes

**Stability** Moisture sensitive. May react with air to form toxic gas.

**Conditions to Avoid** Avoid dust formation. Excess heat. Exposure to air. Incompatible products. Exposure to moist air or water. Temperatures above 150°C. acids.

**Incompatible Materials** Acids, Metals

**Hazardous Decomposition Products** Sulfur oxides, Sodium oxides

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Sodium bisulfite | LD50 = 1310 mg/kg ( Rat ) | Not listed | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** May cause eye, skin, and respiratory tract irritation

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Sodium bisulfite | 7631-90-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available
**Endocrine Disruptor Information** No information available

**Other Adverse Effects** See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Sodium bisulfite | Not listed | LC50: = 240 mg/L, 96h static (Gambusia affinis) | Not listed | EC50: = 119 mg/L, 48h (Daphnia magna) |

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.
**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 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

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sodium bisulfite | X | X | - | 231-548-0 | - | | X | X | X | X | 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 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | Yes |

**CWA (Clean Water Act)**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Sodium bisulfite | X | 5000 lb | - | - |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Sodium bisulfite | 5000 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Sodium bisulfite | 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**

D2B Toxic materials
F Dangerously reactive material

## 16. Other information

**Prepared By**

Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 14-May-2010
**Revision Date** 05-Feb-2016
**Print Date** 05-Feb-2016
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

**End of SDS**

# Material Safety Data Sheet

**Creation Date** 20-Jan-2010 **Revision Date** 20-Jan-2010 **Revision Number** 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** **Sodium sulfite anhydrous**

**Cat No.** **BP355-500; S430-3; S430-10; S430-500; S447-3; S447-500**

**Synonyms** Disodium sulfite; Sulfurous acid, disodium salt (Crystalline/Powder/Certified ACS/Low Phosphate)

**Recommended Use** Laboratory chemicals

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Emergency Telephone Number**
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 703-527-3887

## 2. HAZARDS IDENTIFICATION

**WARNING!**

**Emergency Overview**

Contact with acids liberates toxic gas. May cause eye, skin, and respiratory tract irritation . May cause central nervous system effects.

**Appearance** Off-white **Physical State** Solid **odor** odorless

**Target Organs** Central nervous system (CNS)

**Potential Health Effects**

**Acute Effects**
**Principle Routes of Exposure**

**Eyes** May cause irritation.
**Skin** May cause irritation. May be harmful in contact with skin.
**Inhalation** May cause irritation of respiratory tract. May be harmful if inhaled.
**Ingestion** May be harmful if swallowed. May cause central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Effects** Mutagenic effects have occurred in experimental animals..

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Haz/Non-haz**

| Component | CAS-No | Weight % |
|---|---|---|
| Sodium sulfite | 7757-83-7 | 97 |

## 4. FIRST AID MEASURES

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

**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. Get medical attention immediately if symptoms occur.

**Ingestion** Do not induce vomiting. Obtain medical attention.

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Flash Point** No information available.
**Method** No information available.

**Autoignition Temperature** No information available.

**Explosion Limits**
**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** 1 **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. Avoid contact with skin, eyes and 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** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

***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

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | Off-white |
| **odor** | odorless |
| **Odor Threshold** | No information available. |
| **pH** | 8.5-10 5% aq.sol. |
| **Vapor Pressure** | No information available. |
| **Vapor Density** | No information available. |
| **Viscosity** | No information available. |
| **Boiling Point/Range** | No information available. |
| **Melting Point/Range** | >500°C / 932°F |
| **Decomposition temperature °C** | 500 |
| **Flash Point** | No information available. |
| **Evaporation Rate** | No information available. |
| **Specific Gravity** | 2.630 |
| **Solubility** | Partly soluble in water |
| **log Pow** | No data available |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Molecular Weight** | 126.04 |
| **Molecular Formula** | Na2SO3 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability** | Air sensitive. Moisture sensitive. |
| **Conditions to Avoid** | Incompatible products. Excess heat. Exposure to air. Exposure to moisture. |
| **Incompatible Materials** | Strong oxidizing agents, Acids |
| **Hazardous Decomposition Products** | Sulfur oxides, Sodium oxides |
| **Hazardous Polymerization** | Hazardous polymerization does not occur |
| **Hazardous Reactions .** | Contact with acids liberates toxic gas. |

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Sodium sulfite | 820 mg/kg ( Rat ) | Not listed | 22 mg/L ( Rat ) 1 h<br>5.5 mg/L ( Rat ) 4 h |

| | |
|---|---|
| **Irritation** | No information available. |
| **Toxicologically Synergistic Products** | No information available. |

**Chronic Toxicity**

| | |
|---|---|
| **Carcinogenicity** | There are no known carcinogenic chemicals in this product |
| **Sensitization** | No information available. |
| **Mutagenic Effects** | Mutagenic effects have occurred in experimental animals. |
| **Reproductive Effects** | No information available. |
| **Developmental Effects** | No information available. |
| **Teratogenicity** | No information available. |
| **Other Adverse Effects** | See actual entry in RTECS for complete information. |

**Endocrine Disruptor Information** No information available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Sodium sulfite | Not listed | Not listed | EC50 = 770 mg/L 17 h | LC50 24 h 330 mg/L |

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available

**Mobility** .

| Component | log Pow |
|---|---|
| Sodium sulfite | -4 |

## 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

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | CHINA | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sodium sulfite | X | X | - | 231-821-4 | - | | X | X | X | X | KE-31612 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**
Not applicable

### 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** 20-Jan-2010

**Print Date** 20-Jan-2010

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

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of MSDS**