TREVIGEN® Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04/29/2015 Date of issue: 04/16/2015

Version: 1.0

# **SECTION 1: IDENTIFICATION**

1.1. Product Identifier

**Product Form:** Mixture

**Product Name: Stain Solubilization Solution** 

Product Code: 5011-024-04

1.2. Intended Use of the Product

No use is specified.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Trevigen Inc.

8405 Helgerman Court

20877 Gaithersburg, MD 20877

T 1-800-TREVIGEN

1.4. Emergency Telephone Number

**Emergency Number** : 301-216-2800

# **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1. Classification of the Substance or Mixture

# Classification (GHS-US)

Met. Corr. 1 H290 Aquatic Acute 3 H402

Full text of H-phrases: see section 16

#### 2.2. Label Elements

**GHS-US Labeling** 

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H290 - May be corrosive to metals.

H402 - Harmful to aquatic life.

**Precautionary Statements (GHS-US)**: P234 - Keep only in original container.

P273 - Avoid release to the environment.

P390 - Absorb spillage to prevent material damage.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container in accordance with local, regional, national,

territorial, provincial, and international regulations

#### 2.3. Other Hazards

No additional information available

2.4. Unknown Acute Toxicity (GHS-US) No data available

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

# 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Sodium lauryl sulfate	(CAS No) 151-21-3	5	Flam. Sol. 2, H228
			Acute Tox. 4 (Oral), H302
			Acute Tox. 4 (Inhalation:dust,mist), H332
			Skin Irrit. 2, H315

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			Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
Hydrogen chloride	(CAS No) 7647-01-0	1.82	Met. Corr. 1, H290 Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335

Full text of H-phrases: see section 16

#### **SECTION 4: FIRST AID MEASURES**

# 4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do not induce vomiting. Rinse mouth. Seek medical attention if a large amount is swallowed.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation:** May cause respiratory irritation. **Skin Contact:** May cause skin irritation. **Eye Contact:** May cause eye irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

# 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

# **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

**Explosion Hazard:** Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO<sub>2</sub>). Hydrogen chloride. Hydrogen. Chlorine.

**Reference to Other Sections** 

Refer to section 9 for flammability properties.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

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**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

### **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

# 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in corrosive resistant container with a resistant inner liner. Storage areas should be periodically checked for corrosion and integrity.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Prolonged contact with metals.

#### 7.3. Specific End Use(s)

No use is specified.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Hydrogen chloride (7647-01-0)		
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	7 mg/m³
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	7 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
Québec	PLAFOND (mg/m³)	7.5 mg/m³
Québec	PLAFOND (ppm)	5 ppm

### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

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**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on Basic Physical and Chemical Properties** 9.1.

Liquid

**Physical State Appearance** Not available Odor Not available **Odor Threshold** Not available рΗ Not available **Evaporation Rate** Not available **Melting Point** Not available **Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available

**Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available **Specific Gravity** Not available Solubility Not available Partition Coefficient: N-Octanol/Water Not available

Viscosity Not available

Explosion Data – Sensitivity to Mechanical Impact Not expected to present an explosion hazard due to mechanical impact Explosion Data - Sensitivity to Static Discharge Not expected to present an explosion hazard due to static discharge

### **SECTION 10: STABILITY AND REACTIVITY**

- **Reactivity:** Hazardous reactions will not occur under normal conditions. 10.1.
- 10.2. Stable under recommended handling and storage conditions (see section 7). Chemical Stability:
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.
- 10.5. **Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Prolonged contact with metals.
- Hazardous Decomposition Products: None known. 10.6.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. **Information on Toxicological Effects - Product**

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified. Serious Eye Damage/Irritation: Not classified. Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

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Symptoms/Injuries After Inhalation: May cause respiratory irritation Symptoms/Injuries After Skin Contact: May cause skin irritation Symptoms/Injuries After Eye Contact: May cause eye irritation

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects

Chronic Symptoms: None expected under normal conditions of use 11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Hydrogen chloride (7647-01-0)		
LD50 Oral Rat	238 (238 - 277) mg/kg	
LD50 Dermal Rabbit	> 5010 mg/kg	
LC50 Inhalation Rat	1.68 mg/l (Exposure time: 1 h)	
ATE US (gases)	700.00 ppmV/4h	
ATE US (dust, mist)	0.42 mg/l/4h	
Sodium lauryl sulfate (151-21-3)		
LD50 Oral Rat	977 mg/kg	
LD50 Dermal Rat	> 2000 mg/kg	
LC50 Inhalation Rat	> 3900 mg/m³ (Exposure time: 1 h)	
ATE US (dust, mist)	1.50 mg/l/4h	

# SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - General: Harmful to aquatic life.

Sodium lauryl sulfate (151-21-3)	
LC50 Fish 1	8 (8 - 12.5) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	1.8 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	15 (15 - 18.9) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

### 12.2. Persistence and Degradability Not available

#### 12.3. Bioaccumulative Potential

Sodium lauryl sulfate (151-21-3)	
BCF Fish 1	(will not bioconcentrate)
Log Pow	1.6

**12.4. Mobility in Soil** Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways. **Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

# **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT

Proper Shipping Name : CORROSIVE LIQUIDS, N.O.S. (Contains Hydrogen chloride; Sodium lauryl sulfate)

Hazard Class : 8
Identification Number : UN1760
Label Codes : 8
Packing Group : III
ERG Number : 154



14.2. In Accordance with IMDG

Proper Shipping Name : CORROSIVE LIQUID, N.O.S. (Contains Hydrogen chloride; Sodium lauryl sulfate)

Hazard Class : 8

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Identification Number: UN1760Packing Group: IIILabel Codes: 8EmS-No. (Fire): F-AEmS-No. (Spillage): S-B



#### 14.3. In Accordance with IATA

Proper Shipping Name : CORROSIVE LIQUID, N.O.S. (Contains Hydrogen chloride; Sodium lauryl sulfate)

Packing Group : III
Identification Number : UN1760
Hazard Class : 8
Label Codes : 8
ERG Code (IATA) : 8L



# 14.4. In Accordance with TDG

Proper Shipping Name : CORROSIVE LIQUID, N.O.S. (Contains Hydrogen chloride; Sodium lauryl sulfate)

Packing Group : III
Hazard Class : 8
Identification Number : UN1760
Label Codes : 8



# **SECTION 15: REGULATORY INFORMATION**

# 15.1. US Federal Regulations

Hydrogen chloride (7647-01-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the United States SARA Section 302	
Listed on United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	500 (gas only)
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other
	airborne forms of any particle size)

# Sodium lauryl sulfate (151-21-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 15.2. US State Regulations

# Hydrogen chloride (7647-01-0)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

## 15.3. Canadian Regulations

Stain Solubilization Solution		
WHMIS Classification	Class E - Corrosive Material	



Hydrogen chloride (7647-01-0)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (	Ingredient Disclosure List)
WHMIS Classification	Class A - Compressed Gas
	Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects
	Class E - Corrosive Material

#### Sodium lauryl sulfate (151-21-3)

Listed on the Canadian DSL (Domestic Substances List)

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Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Class B Division 4 - Flammable Solid	

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

# SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 04/29/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

### **GHS Full Text Phrases:**

Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Sol. 2	Flammable solids Category 2
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H228	Flammable solid
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

# Party Responsible for the Preparation of This Document

Trevigen INC. 8405 Helgerman Court Gaithersburg, MD 20877 T: 301-216-2800

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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