

# Safety Data Sheet

## Biebrich Scarlet Solution

### (Biebrich Scarlet, 1% in 1% Acetic Acid)

#### Section 1 - Chemical Product and Company Identification

**SDS Name:** Biebrich Scarlet Solution

**Catalog Numbers:** SO-304, F-364-6

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

#### Section 2 - Hazards Identification

##### GHS Classifications

H315-Skin corrosion/irritation: 2

H319-Serious eye damage/eye irritation: 2A

1% of the mixture consists of ingredients of unknown acute toxicity.

##### Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Warning

##### Hazard Statements:

H315-Causes skin irritation

H319-Causes serious eye irritation

## Precautionary Statements:

P264-Wash thoroughly after handling.

P280-Wear protective gloves/eye protection/face protection.

P302+P352-If on skin: Wash with plenty of soap and water.

P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313-If skin irritation occurs: Get medical advice/attention.

P337+P313- If eye irritation persists: Get medical advice/attention.

P362+P364-Take off contaminated clothing and wash it before reuse.

## Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
4196-99-0	Biebrich Scarlet	1 w/v
64-19-7	Glacial Acetic Acid	1 v/v
7732-18-5	Water	Balance

## Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical attention.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

**Oral Exposure:** If swallowed, seek immediate medical advice. Do not induce vomiting. Rinse mouth with water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam.

**Hazardous Combustion Products:** Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, potentially hazardous fumes and gases.

**Flash Point:** Not available

**Autoignition Temperature:** Not available

**Explosion Limits, Lower:** Not available

**Upper:** Not available

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

## Section 6 - Accidental Release Measures

### **Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

## Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Keep in a tightly closed container. Store in a cool, dry, and well-ventilated area. Keep away from incompatible materials.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### **Personal Protective Equipment**

**Eyes:** 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:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### **Exposure Limits:**

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Biebrich Scarlet CAS#4196-99-0	Not listed	Not listed	Not listed
Glacial Acetic Acid CAS#64-19-7	10 ppm TWA 15 ppm STEL	10 ppm TWA 25 mg/m3 TWA 15 ppm STEL 37 mg/m3 STEL 50 ppm IDLH	10 ppm TWA 25 mg/m3 TWA

**OSHA Vacated PELS:** Glacial Acetic Acid: 10 ppm TWA; 25 mg/m3 TWA

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Appearance:** Dark red  
**Odor:** Slightly vinegar-like  
**Vapor Pressure:** Not available  
**Odor Threshold:** Not available  
**Vapor Density:** Not available  
**pH:** Approx. 2.9  
**Relative Density:** Not available  
**Melting point/freezing point:** Not available  
**Solubility:** Soluble in water  
**Boiling Point:** Not available  
**Flash Point:** Not available  
**Evaporation Rate:** Not available  
**Flammability (solid, gas):** Not available  
**Partition coefficient: n-octanol/water:** Not available  
**Autoignition Temperature:** Not available  
**Decomposition Temperature:** Not available  
**Viscosity:** Not available  
**Specific Gravity/Density:** Not available

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, excess heat, and freezing.  
**Incompatibilities with Other Materials:** Strong oxidizing agents, reducing agents, strong bases, metals, acids, chromic acid, ethylene glycol, perchloric acid, nitric acid, phosphorous trichloride, sodium peroxide, strong caustics, carbonates, hydroxides, oxides, and phosphates.  
**Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, potentially hazardous fumes and gases.

## Section 11 - Toxicological Information

### **CAS#4196-99-0 Biebrich Scarlet:**

LD50 Oral: Not available  
LD50 Dermal: Not available  
LC50 Inhalation: Not available

**Carcinogenicity:** Biebrich Scarlet CAS#4196-99-0 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

### **CAS#64-19-7 Glacial Acetic Acid: RTECS#: AF1225000**

LD50 Oral: 3310 mg/kg (rat)  
LD50 Dermal: 1060 mg/kg (rabbit)

LC50 Inhalation: 11.4 mg/L 4h (rat)

**Investigated as a mutagen, reproductive effector.**

Skin corrosion/irritation: skin (rabbit), causes severe burns.

Serious eye damage/eye irritation: eyes (rabbit), corrosive to eyes, and causes serious eye damage.

**Carcinogenicity:** Glacial Acetic Acid CAS#64-19-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Note: Acetic acid is extremely destructive to all body tissue. In concentrated form (glacial acetic acid), it is corrosive and flammable. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Ingestion of concentrated acetic acid causes severe swelling, severe damage to the tissue and danger of perforation. Contact with concentrated acetic acid may cause serious damage to the skin. Eye contact with concentrated acetic acid may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

**Information on the likely routes of exposure:** Routes of entry anticipated: oral, dermal, inhalation, and eye.

**Epidemiology:** Not available.

**Teratogenicity:** Not available.

**Reproductive Effects:** Not available.

**Developmental Effects:** Not available.

**Neurotoxicity:** Not available.

**Mutagenicity:** Not available.

**Specific Target Organ Toxicity, Single Exposure:** Not available.

**Specific Target Organ Toxicity, Repeated Exposure:** Not available.

**Symptoms associated with exposure:** Eye contact may result in pain, irritation, watering, redness, blurred vision. Skin contact may result in irritation and redness.

**The toxicological properties of this material have not been thoroughly investigated.**

Section 12 - Ecological Information
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**Ecotoxicity:** Do not release to the environment. Do not release to drains. Harmful to aquatic life.

**CAS# 64-19-7 Glacial Acetic Acid:**

LC50, freshwater fish: 88 mg/L 96h (pimephales promelas)(fathead minnow)

LC50, freshwater fish: 75 mg/L 96h (lepomis macrochirus)(bluegill)

EC50, water flea: 95 mg/L 24h

EC50, microtox: 8.8 mg/L 5min (photobacterium phosphoreum)

**Persistence and degradability:** Not available.

**Bio-accumulative potential:** Not available.

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

Section 13 - Disposal Considerations
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**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information
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**DOT**

Non-Regulated

Section 15 - Regulatory Information
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**Canada Regulatory Information**

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information
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**SDS Creation Date:** 1-8-10

**Revision #1:** 10-18-13 MH

**Revision #2:** 11-5-21

**Revision #3:** 1-2-24

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