

# Safety Data Sheet

## Alizarin Red S, 2% Aqueous, pH 7.0

### Section 1 - Chemical Product and Company Identification

**SDS Name** Alizarin Red S, 2% Aqueous, pH 7.0

**Catalog Numbers:** SO-1304

**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

H316-Skin corrosion/irritation: 3

2% of the mixture consists of ingredients of unknown acute toxicity.

#### Pictograms or Hazard Symbols and Hazard Statement(s):



Signal Word: Warning

#### Hazard Statements:

H316-Causes mild skin irritation

#### Precautionary Statements:

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

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
130-22-3	Alizarin Red S	2 w/v
1336-21-6	Ammonium Hydroxide (28-30%)	Approx. 0.4% 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. Remove contact lenses, if present. Seek 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. Rinse mouth with water. After rinsing, drink water. Do NOT induce vomiting.

**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, sulfur oxides, sodium oxides, nitrogen oxides, ammonia, irritating and toxic fumes and gases.

**Flash Point:** Not available

**Auto ignition 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. Wash thoroughly after handling. Wear personal protective equipment. 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. Protect from direct sunlight. 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 chemical-resistant 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
Alizarin Red S CAS#130-22-3	Not listed	Not listed	Not listed
Ammonium Hydroxide (28-30%) CAS#1336-21-6	25 ppm TWA 35 ppm STEL	25 ppm TWA 18 mg/m <sup>3</sup> TWA 35 ppm STEL 27 mg/m <sup>3</sup> STEL	For ammonia: 50 ppm TWA; 35 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** Ammonium Hydroxide (28-30%): 35 ppm STEL 27 mg/m<sup>3</sup> STEL

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Appearance:** Dark red-brown  
**Odor:** Odorless  
**Vapor Pressure:** Not available  
**Odor Threshold:** Not available  
**Vapor Density:** Not available  
**pH:** 7.0  
**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, ignition sources, and excess heat.  
**Incompatibilities with Other Materials:** Strong oxidizing agents, acids, acrolein, dimethyl sulfate, halogens, silver nitrate, propylene oxide, nitromethane, silver oxide, silver permanganate, oleum, beta-propiolactone, metals, aluminum, lead, nickel, silver, zinc, copper, iron, metal alloys, and fluorine.  
**Hazardous Decomposition Products:** Carbon oxides, sodium oxides, sulfur oxides, nitrogen oxides, ammonia, irritating and toxic fumes and gases.

## Section 11 - Toxicological Information

**CAS#130-22-3 Alizarin Red S: RTECS#: CB1095300**

LD50, Intravenous: 70 mg/kg (mouse)  
LD50 Oral: Not available  
LD50 Dermal: Not available  
LC50 Inhalation: Not available

**Carcinogenicity:** Alizarin Red S CAS#130-22-3 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

**CAS#1336-21-6 Ammonium Hydroxide (28-30%): RTECS#: BQ9625000**

LD50 Oral: >350 mg/kg (rat)  
LD50 Dermal: Not available

LC50 Inhalation: Not available

**Carcinogenicity:** Ammonium Hydroxide CAS#1336-21-6 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

**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:** Mild skin irritation. No specific data available.

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

## Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release to drains.

### **CAS# 1336-21-6 Ammonium Hydroxide (28-30%):**

LC50, freshwater fish: 0.53 mg/L 96h

LC50, freshwater fish: 8.2 mg/L 96h

EC50, water flea: 0.66 mg/L 48h

**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

**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

## Section 14 - Transport Information

### **DOT**

Non-Regulated

## Section 15 - Regulatory Information

### 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

**SDS Creation Date:** 4-19-19

**Revision #1:** 12-15-22

**Revision #2:** 8-8-24

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