

Safety Data Sheet

ALCIAN BLUE, 1% pH 2.5

Section 1 - Chemical Product and Company Identification

SDS Name: Alcian Blue, 1% pH 2.5

Catalog Numbers: SO-268, A-116-6, E-323-1, E-330-3

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

H290-Corrosive to metals: 1

H315-Skin corrosion/irritation: 2

H318-Serious eye damage/eye irritation: 1

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

Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

Hazard Statements:

H290-May be corrosive to metals

H315-Causes skin irritation

H318-Causes serious eye damage

Precautionary Statements:

P234-Keep only in original container.

P264-Wash thoroughly after handling.

P280-Wear protective gloves/protective clothing/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.

P310-Immediately call a Poison Center or doctor/physician.

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

P362-Take off contaminated clothing and wash before reuse.

P390-Absorb spillage to prevent material damage.

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

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
64-19-7	Glacial Acetic Acid	3 v/v
33864-99-2	Alcian Blue	1 w/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, copper oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; 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. Store in a tightly closed container in a cool, dry, and well-ventilated area. Keep away from incompatible materials.

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.

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	NIOSH	OSHA - Final PELs
Glacial Acetic Acid CAS#64-19-7	15 ppm STEL 10 ppm TWA	10 ppm TWA 25 mg/m ³ TWA 50 ppm IDLH 15 ppm STEL 37 mg/m ³ STEL	10 ppm TWA 25 mg/m ³ TWA
Alcian Blue CAS#33864-99-2	1 mg/m ³ TWA	1 mg/m ³ TWA 100 mg/m ³ IDLH	Not listed

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

Section 9 - Physical and Chemical Properties
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Physical State: Liquid

Appearance: Dark Blue

Odor: Vinegar-like

Vapor Pressure: Not available

Odor Threshold: Not available

Vapor Density: Not available

pH: 2.4-2.6

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

Auto-ignition 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, hot surfaces, ignition sources, and freezing.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, metals, acids, chromic acid, ethylene glycol, perchloric acid, nitric acid, phosphorous trichloride, oxidizers, sodium peroxide, strong caustics, carbonates, hydroxides, oxides, and phosphates.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, sulfur oxides, copper oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Section 11 - Toxicological Information
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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 (rat) 4h

Investigated as a mutagen, reproductive effector.

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

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

CAS#33864-99-2 Alcian Blue:

LD50 Oral: Not available

LD50 Dermal: Not available

LC50 Inhalation: Not available

Carcinogenicity: Alcian Blue CAS#33864-99-2 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

Note: Alcian blue is a copper compound. Target organ effects due to chronic copper poisoning include damages to the liver, brain, kidney, eyes, blood, and blood vessels.

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

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. Harmful to aquatic life.

CAS#64-19-7 Glacial Acetic Acid:

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

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

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

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: 10/15/12

Revision #1. RC 8/20/13

Revision #2. RC 2/17/16

Revision #3. 11-5-18

Revision #4. 7-20-22

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