Safety Data Sheet TOLUIDINE BLUE O, 0.1% AQUEOUS

Section 1 - Chemical Product and Company Identification

SDS Name: Toluidine Blue O, 0.1% Aqueous

Catalog Numbers: SO-461, E-322-1

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

Based on available data, the GHS classification criteria are not met.

Pictograms or Hazard symbols and Hazard statement(s):

No GHS Hazard Symbols.

Hazard Statements:

No GHS Hazard Statements.

Precautionary Statements:

No GHS Precautionary Statements.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
92-31-9	Toluidine Blue O	0.1 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. Call a physician.

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

Oral Exposure: If swallowed, seek immediate medical advice. 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, 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: 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. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store in a cool, dry, and well-ventilated area. Keep container tightly closed. 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
Toluidine Blue O CAS#92-31-9	Not listed	Not listed	Not listed

Section 9 - Physical and Chemical Properties

Physical State: Liquid Appearance: Dark Blue Odor: Not available

Vapor Pressure: Not available Odor Threshold: Not available Vapor Density: Not available

pH: Not available

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Soluble in water
Boiling Point: Not available
Flash Point: Not available
Evaporation Pate: 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.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, sulfur oxides,

hydrogen chloride gas, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

CAS#92-31-9 Toluidine Blue O: RTECS#: SP5670000

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

LD50 Intraperitoneal: 215 mg/kg (rat)

Carcinogenicity: Toluidine Blue O CAS#92-31-9 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, eye.

Epidemiology: Not available. **Teratogenicity:** Not available.

Reproductive Effects: Not available. **Developmental Effects:** Not available.

Neurotoxicity: Not available.

Mutagenicity: Cytogenetic analysis (hamster, ovary).

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.

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.** 8/27/14 YM **Revision #2.** 3-19-19 **Revision #3.** 10-5-22

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