

SAFETY DATA SHEET

TOLUIDINE BLUE O

Catalog Numbers: R-122

Company Identification: ROWLEY BIOCHEMICAL

10 ELECTRONICS AVENUE

DANVERS, MA 01923

for information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

1. PRODUCT IDENTIFICATION:

Synonyms: Basic Blue 17; C.I. 52040; Tolonium Chloride.

CAS No.: 92-31-9.

Molecular Weight: 305.82.

Chemical Formula: C₁₅H₁₆ClN₃S.

2. HAZARDS IDENTIFICATION:

Emergency Overview

Appearance: Dark green powder. The toxicological properties of this material have not been fully investigated.

CAUTION! May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: No data found.

HMIS Classification

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Health hazard: 0

Flammability: 0

Physical hazards: 0

NFPA Rating

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Health hazard: 0

Fire: 0

Reactivity Hazard: 0

Potential Health Effects:

Eye: May cause eye irritation. The toxicological properties of this material have not been fully investigated.

Skin: May cause skin irritation. The toxicological properties of this material have not been fully investigated.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic: No information found.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Percent</u>	<u>Hazardous</u>
Toluidine Blue O	92-31-9		No

4. FIRST AID MEASURES:

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

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 and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not available.

Auto-ignition Temperature: Not available.

Explosion Limits, Lower / Upper: Not available.

NFPA Rating: (Estimated) Health: 1; Flammability: 0; Instability: 0.

6. ACCIDENTAL RELEASE MEASURES:

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment Section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

7. HANDLING AND STORAGE:

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<u>Chemical Name</u>	<u>ACGIH</u>	<u>NIOSH</u>	<u>OSHA - Final PELs</u>
Toluidine Blue O	None listed	None listed	None listed

OSHA Vacated PELs: Toluidine Blue O: No OSHA Vacated PELs are listed for this chemical.

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: Follow the OSHA respirators regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Powder

Appearance: Dark green

Odor: No information available.

pH: No information available.

Solubility: 3.82g/100 ml water.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Specific Gravity/Density: Not available.

Vapor Pressure: Negligible.

Vapor Density: Not available.

Evaporation Rate: Negligible.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, excess heat.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, oxides of nitrogen, oxides of sulfur, carbon dioxide.

11. TOXICOLOGICAL INFORMATION:

RTECS#: CAS# 92-31-9: SP5670000.

LD50/LC50: Not available.

Carcinogenicity: CAS# 92-31-9: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: No information available.

Other Studies: No data available.

12 ECOLOGICAL INFORMATION:

Environmental Fate: No information available.

Environmental Toxicity: No data available.

13. DISPOSAL CONSIDERATIONS:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. TRANSPORT REGULATIONS:

Not regulated.

15. REGULATORY INFORMATION:

US FEDERAL

TSCA CAS# 92-31-9 is listed on the TSCA inventory.

Health & Safety Reporting List None of the chemicals are on the Health and Safety Reporting List.

Chemical Test Rules None of the chemicals in this product are under a Chemical Test Rule.

Section 12b None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ) & Section 302 (TPQ) None of the chemicals in this material/product have an RQ or TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

STATE CAS# 92-31-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

EUROPEAN/INTERNATIONAL REGULATIONS

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases: Not available

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection) CAS# 92-31-9: No information available.

Canada - DSL/NDSL CAS# 92-31-9 is listed on Canada's DSL List.

Canada - WHMIS: Not available.

Canadian Ingredient Disclosure List

Exposure Limits

16. DISCLAIMER INFORMATION:

MSDS Creation Date: 10/15/12

Revision #1. 8/1/14 YM

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