Material Safety Data Sheet  
Toluidine Blue, 1% Aqueous

Section 1 - Chemical Product and Company Identification

MSDS Name:  
Toluidine Blue, 1% Aqueous

Catalog Numbers:  
LC26165

Synonyms:  
None

Company Identification:  
LabChem Inc  
200 William Pitt Way  
Pittsburgh, PA 15238

Company Phone Number:  
(412) 826-5230

Emergency Phone Number:  
(800) 424-9300

CHEMTREC Phone Number:  
(800) 424-9300 or  
011-703-527-3887

Section 2 – Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>balance</td>
</tr>
<tr>
<td>92-31-9</td>
<td>Toluidine Blue O</td>
<td>1</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Purple solution

Caution. May cause irritation to eyes and skin.

Target Organs: None known.

Potential Health Effects

Eye:  
May cause eye irritation.

Skin:  
May cause skin irritation.

Ingestion:  
May cause gastrointestinal tract irritation.

Inhalation:  
No hazard expected during normal use.

Chronic:  
No information found.
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Section 4 - First Aid Measures

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

**Skin:**
Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

**Ingestion:**
If victim is conscious, give 2-4 glasses of water and induce vomiting. Get medical aid at once.

**Inhalation:**
Move victim to fresh air. Give artificial respiration if necessary. Get medical aid.

**Notes to Physician:**
Treat symptomatically and supportively.

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.

**Extinguishing Media:**
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**
No information found.

**Flash Point:**
No information found.

**NFPA Rating:**
Health- 1, Flammability- 0, Instability- 0

**Explosion Limits:**
Lower: n/a  Upper: n/a

Section 6 - Accidental Release Measures

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

**Spills/Leaks:**
Absorb spill using an absorbent, non-combustible material such as earth, sand, diatomaceous earth, vermiculite, and transfer to a suitable container labeled for disposal.

Section 7 - Handling and Storage

**Handling:**
Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.
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Storage:
Store capped at room temperature.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities using or storing this material should be equipped with an eyewash and safety shower.
Provide local exhaust or general dilution ventilation.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name:</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>None of the components are on this list.</td>
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<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Toluidine Blue O</td>
<td>None of the components are on this list.</td>
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</tr>
</tbody>
</table>

OSHA Vacated PELs:
None.

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. Do not wear contact lenses when working with chemicals.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: Purple
Odor: Odorless
pH: No information found.
Vapor Pressure: No information found.
Vapor Density: No information found.
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: No information found.
Freezing/Melting Point: No information found.
Decomposition Temperature: No information found.
Solubility in water: Soluble
Specific Gravity/Density: No information found.
Molecular Formula: No information found.
Molecular Weight: No information found.
Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures

Conditions to Avoid:
Incompatible materials.

Incompatibilities with Other Materials:
Oxidizing agents.

Hazardous Decomposition Products:
Chlorine, sulfur, carbon dioxide, carbon monoxide.

Hazardous Polymerization:
Has not been reported

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5:  ZC0110000.
CAS# 92-31-9:  SP5670000.

LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90mL/kg
CAS# 92-31-9:
Not available

Carcinogenicity:
CAS# 7732-18-5:  Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or CA Prop 65.
CAS# 92-31-9:  Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or CA Prop 65.

Epidemiology:
No information found

Teratogenicity:
No information found

Reproductive:
No information found

Mutagenicity:
See actual entry in RTECS for complete information.

Neurotoxicity:
No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.
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Section 14 - Transport Information

US DOT
Shipping Name: Not regulated.
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 92-31-9 is listed on the TSCA Inventory.
SARA Reportable Quantities (RQ):
None of the components are on this list.
CERCLA/SARA Section 313:
None of the components are on this list.
OSHA - Highly Hazardous:
None of the components are on this list.

US State
State Right to Know:
Not listed
California Regulations:
None.

European/International Regulations
Canadian DSL/NDSL:
CAS# 7732-18-5 is listed on the Canadian DSL List.
CAS# 92-31-9 is listed on the Canadian DSL List.
Canada Ingredient Disclosure List:
CAS# 7732-18-5 is not listed on the Canadian Ingredient Disclosure List.
CAS# 92-31-9 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 5, 2000
Revision Date: June 16, 2010

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