Material Safety Data Sheet  
New Methylene Blue N

Section 1 - Chemical Product and Company Identification

**MSDS Name:**  
New Methylene Blue N

**Catalog Numbers:**  
LC17660

**Synonyms:**  
New Methylene Blue N Solution for Reticulocytes

**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>&gt;97</td>
</tr>
<tr>
<td>6487-48-5</td>
<td>Potassium Oxalate</td>
<td>1.6</td>
</tr>
<tr>
<td>1934-16-3</td>
<td>New Methylene Blue N</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**Warning!**  
May cause kidney damage. May cause eye, skin, respiratory, and digestive tract irritation. May cause hypocalcemia, which impairs nervous and cardiac tissue function.  
**Target Organs:** Kidneys, heart, brain, eyes, skin, nerves, mucous membranes.

**Appearance:** Dark blue solution

**Potential Health Effects**

**Eye:**
May cause eye irritation.

**Skin:**
May cause skin irritation. May cause dermatitis.

**Ingestion:**
May be harmful if ingested. May cause digestive tract irritation. May cause shock, muscle tremors, convulsions, dysrhythmia, and rapid labored respiration. May cause hypocalcemia due to the formation of insoluble calcium oxalate, which can be deposited in the brain and kidney tubules.
**Inhalation:**
May cause irritation to the respiratory tract.

**Chronic:**
May cause dermatitis and conjunctivitis. May cause respiratory tract inflammation, depressed thyroid function, weight loss, and kidney damage.

## Section 4 - First Aid Measures

**Eyes:**
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

**Skin:**
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:**
Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

**Inhalation:**
Move victim to fresh air immediately. Get medical aid if irritation or other symptoms appear.

**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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**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 with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.
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Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage:
Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

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>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Potassium oxalate</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</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

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Dark blue</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH:</td>
<td>Neutral</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No information found.</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No information found.</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No information found.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No information found.</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>&gt;100°C (&gt;212°F)</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>&lt;0°C (&lt;32°F)</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No information found.</td>
</tr>
</tbody>
</table>
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Solubility in water: Soluble
Specific Gravity/Density: 1.0 – 1.1
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, excess heat.

Incompatibilities with Other Materials:
Strong oxidizers.

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide, formic acid, oxides of sulfur, oxides of nitrogen.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000.
CAS# 6487-48-5: Not listed.
CAS# 1934-16-3: Not listed.

LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 6487-48-5:
No information found.
CAS# 1934-16-3:
No information found.

Carcinogenicity:
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 6487-48-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 1934-16-3: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:
No information found.

Teratogenicity:
No information found.

Reproductive:
No information found.

Mutagenicity:
No information found.

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.

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# 6487-48-5 is not listed on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the Inventory (40CFR 720.3(u)(2)).
CAS# 1934-16-3 is not 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 chemicals in this product are considered highly hazardous by OSHA.

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

European/International Regulations
Canadian DSL/NDSL:
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 6487-48-5 is not listed on Canada's DSL List.
CAS# 1934-16-3 is not listed on Canada's DSL List.
Canada Ingredient Disclosure List:
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 6487-48-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 1934-16-3 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 12, 1997
Revision Date: September 6, 2011

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