Section 1 - Chemical Product and Company Identification

MSDS Name:
Bromocresol Green-Methyl Red, APHA
Catalog Numbers:
LC11870
Synonyms:
Mixed Indicator for Alkalinity
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;99</td>
</tr>
<tr>
<td>62625-32-5</td>
<td>Bromocresol green, sodium salt</td>
<td>0.1</td>
</tr>
<tr>
<td>845-10-3</td>
<td>Methyl red, sodium salt</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview
Appearance: dark blue to blue-green solution
Caution! May cause irritation to eyes and skin.
Target Organs: none

Potential Health Effects
Eye:
May cause mild eye irritation.
Skin:
May cause mild skin irritation.
Ingestion:
May cause gastrointestinal irritation.
Inhalation:
Inhalation of mists may cause respiratory tract irritation.
Material Safety Data Sheet
Bromocresol Green-Methyl Red, APHA

Chronic:
No information found.

Section 4 - First Aid Measures

Eyes:
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.

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:
Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

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:
>450°C (>842°F)

Flash Point:
Not available

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.

Section 7 - Handling and Storage
Handling:
Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

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>Bromocresol green, sodium salt</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>Methyl red, sodium salt</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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Dark blue to blue-green</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH</td>
<td>Neutral</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>230°C (446°F)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>1.0</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>Mixture</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet
Bromocresol Green-Methyl Red, APHA

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Excess heat.

Incompatibilities with Other Materials:
None known

Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide, hydrogen bromide, oxides of sulfur, nitrogen oxides, ammonia.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000
CAS# 62625-32-5: Not listed
CAS# 845-10-3: Not listed

LD50/LC50:
CAS# 7732-18-5:
Oral, rat: >90 ml/kg
CAS# 62625-32-5:
Not available
CAS# 845-10-3:
Not available

Carcinogenicity:
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 65.
CAS# 62625-32-5: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 65.
CAS# 845-10-3: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 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
Material Safety Data Sheet
Bromocresol Green-Methyl Red, APHA

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# 62625-32-5 is listed on the TSCA Inventory.
  - CAS# 845-10-3 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 available
- **California Regulations:**
  - None

**European/International Regulations**
- **Canadian DSL/NDSL:**
  - CAS# 7732-18-5 is listed on Canada's DSL List.
  - CAS# 62625-32-5 is listed on Canada's DSL List.
  - CAS# 845-10-3 is listed on Canada's DSL List.
- **Canada Ingredient Disclosure List:**
  - CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
  - CAS# 62625-32-5 is not listed on Canada's Ingredient Disclosure List.
  - CAS# 845-10-3 is not listed on Canada's Ingredient Disclosure List.

### Section 16 - Other Information
Material Safety Data Sheet
Bromocresol Green-Methyl Red, APHA

MSDS Creation Date: November 16, 1997
Revision Date: January 25, 2011

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.