Material Safety Data Sheet
1-Amino-2-Naphthol-4-Sulfonic Acid Solutions

Section 1 - Chemical Product and Company Identification

MSDS Name:
1-Amino-2-Naphthol-4-Sulfonic Acid Solution

Catalog Numbers:
LC10860, LC10890

Synonyms:
ASTM reagent for Phosphorus, APHA reagents for silica and phosphorus.

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>7681-57-4</td>
<td>Sodium metabisulfite</td>
<td>6.2 (LC10860)</td>
</tr>
<tr>
<td>7631-90-5</td>
<td>Sodium bisulfite</td>
<td>15 (LC10890)</td>
</tr>
<tr>
<td>7757-83-7</td>
<td>Sodium sulfite</td>
<td>0.5-3.7</td>
</tr>
<tr>
<td>116-63-2</td>
<td>1-amino-2-naphthol-4-sulfonic acid</td>
<td>0.1 -0.25</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, yellow to light brown solution
Warning: May cause irritation to eyes, skin, respiratory and gastrointestinal tracts.

Target Organs: Eyes, skin, respiratory system.

Potential Health Effects

Eye:
May cause eye irritation.

Skin:
May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:
May be harmful if swallowed. May cause gastrointestinal tract irritation.
Inhalation:
May cause upper respiratory tract irritation.

Chronic:
May cause chronic cough, sore throat, dermatitis, and conjunctivitis.

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

Ingestion:
Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Get medical aid at once.

Inhalation:
Move victim to fresh air immediately. 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:
LC10860: Health-1, Flammability- 0, Instability- 0.
LC10890: Health-2, 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 spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Area may be washed down with water.
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1-Amino-2-Naphthol-4-Sulfonic Acid Solutions

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Do not ingest or inhale. Avoid contact with eyes, skin, and clothing. Work in a well-ventilated area.

Storage:
Store capped at room temperature. Protect from heat and incompatibles.

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 to keep airborne levels below the permissible exposure limits.

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>Sodium metabisulfite</td>
<td>5 mg/m3 TWA</td>
<td>None of the components are on this list</td>
<td>5 mg/m3 TWA</td>
</tr>
<tr>
<td>Sodium bisulfite</td>
<td>5 mg/m3 TWA</td>
<td>None of the components are on this list</td>
<td>5 mg/m3 TWA</td>
</tr>
<tr>
<td>Sodium sulfite</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>1-amino-2-naphthol-4-sulfonic acid</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:
Sodium metabisulfite: 5 mg/m3 TWA
Sodium bisulfite: 5 mg/m3 TWA

Personal Protective Equipment

Eyes:
Do not wear contact lenses when working with chemicals. 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 respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
## Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow to light brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight sulfur dioxide odor</td>
</tr>
<tr>
<td>pH</td>
<td>Acidic</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>&lt;ether</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information found.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No information found.</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>No information found.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information found.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble.</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>No information found</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No information found.</td>
</tr>
</tbody>
</table>

## 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:**
Oxides of nitrogen, oxides of sulfur, oxides of carbon, hydrogen sulfide, sodium oxide.

**Hazardous Polymerization:**
Has not been reported.

## Section 11 - Toxicological Information

**RTECS:**
CAS# 7732-18-5: ZC0110000.
CAS# 7681-57-4: UX8225000.
CAS# 7631-90-5: VZ2000000.
CAS# 7757-83-7: WE2150000.
CAS# 116-63-2: QK1292000.

**LD50/LC50:**
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 7681-57-4:
Dermal, guinea pig: LD50 > 1 g/kg
Oral, rat: LD50 = 1130-1900 mg/kg.
CAS# 7631-90-5:
Oral, rat: LD50 = 2 g/kg.
CAS# 7757-83-7:
Oral, mouse: LD50 = 820 mg/kg.
CAS# 116-63-2:
No information found.

**Carcinogenicity:**
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7681-57-4: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7631-90-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7757-83-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 116-63-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

**Epidemiology:**
Sodium metabisulfite, sodium sulfite, sodium bisulfite are irritating to skin, eyes, and mucous membranes.

**Teratogenicity:**
No information found

**Reproductive:**
See actual entry in RTECS for complete information.

**Mutagenicity:**
No information found

**Neurotoxicity:**
No information found

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**Section 12 - Ecological Information**

No information found

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**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# 7681-57-4 is listed on the TSCA Inventory.
- CAS# 7631-90-5 is listed on the TSCA Inventory.
- CAS# 7757-83-7 is listed on the TSCA Inventory.
- CAS# 116-63-2 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):
- CAS# 7631-90-5: final RQ = 5000 pounds (2270 kg)

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:
Sodium metabisulfite can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
Sodium bisulfite can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:
None.

European/International Regulations
Canadian DSL/NDSL:
- CAS# 7732-18-5 is listed on Canada's DSL List.
- CAS# 7681-57-4 is listed on Canada's DSL List.
- CAS# 7631-90-5 is listed on Canada's DSL List.
- CAS# 7757-83-7 is listed on Canada's DSL List.
- CAS# 116-63-2 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# 7681-57-4 is listed on Canada's Ingredient Disclosure List.
- CAS# 7631-90-5 is listed on Canada's Ingredient Disclosure List.
- CAS# 7757-83-7 is not listed on Canada's Ingredient Disclosure List.
- CAS# 116-63-2 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 17, 1997
Revision Date: April 3, 2013

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