Material Safety Data Sheet
Potassium Nitrate, 10%

Section 1 - Chemical Product and Company Identification

**MSDS Name:**
Potassium Nitrate, 10%

**Catalog Numbers:**
LC19820, LC19830

**Synonyms:**
Potassium Nitrate Solution

**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>7757-79-1</td>
<td>Potassium nitrate</td>
<td>10</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**Emergency Overview**

**Appearance:** Clear, colorless liquid.

**Caution!** Strong oxidizer. May cause irritation to eyes, skin, respiratory and gastrointestinal tracts.

**Target Organs:** Blood, kidneys, central nervous system.

**Potential Health Effects**

**Eye:**
May cause eye irritation.

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

**Ingestion:**
Ingestion of large quantities may cause violent gastroenteritis with nausea, vomiting, diarrhea, and severe abdominal pain. May cause methemoglobinemia. Symptoms may include vertigo, muscular weakness, irregular pulse, convulsions, anoxia, coma, fall in blood pressure, roaring sound in the ears, persistent throbbing headache, generalized tingling sensation, heart palpitations, and visual
disturbances caused by increased intraocular tension and intracranial pressure. Circulatory collapse and death may occur.

**Inhalation:**
Inhalation may cause coughing, dyspnea, headache, flushing of skin, nausea, vomiting, shock, marked hypotension, cyanosis, convulsions, coma, respiratory paralysis.

**Chronic:**
Repeated or prolonged exposure to small amounts may affect the blood, respiration and kidneys and produce anemia, methemoglobinemia with attendant cyanosis and anoxia, hyperpnea and later dyspnea, and nephritis.

### 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 soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

**Ingestion:**
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid at once.

**Inhalation:**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**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. Contact with combustible or easily oxidizable substances may cause fire.

**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:**
CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.
CAS# 7757-79-1: Health- 2, Flammability- 0, Instability- 0, Special Hazard- OX.

**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.
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Spills/Leaks:
Absorb spills with inert absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Keep away from combustible materials (wood, paper, fuels).

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Do not ingest or inhale. Avoid contact with eyes, skin, and clothing.
Storage:
Do not store near combustible materials. Store capped in a cool, well-ventilated area. 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.

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 nitrate</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.

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. Use a NIOSH/MSHA 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>Physical State:</th>
<th>Clear liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH:</strong></td>
<td>Neutral</td>
</tr>
<tr>
<td><strong>Vapor Pressure:</strong></td>
<td>14 mm Hg @ 20°C</td>
</tr>
<tr>
<td><strong>Vapor Density:</strong></td>
<td>&gt; air</td>
</tr>
<tr>
<td><strong>Evaporation Rate:</strong></td>
<td>&lt; ether</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>No information found.</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>No information found.</td>
</tr>
<tr>
<td><strong>Freezing/Melting Point:</strong></td>
<td>No information found.</td>
</tr>
<tr>
<td><strong>Decomposition Temperature:</strong></td>
<td>400°C (752°F)</td>
</tr>
<tr>
<td><strong>Solubility in water:</strong></td>
<td>Soluble.</td>
</tr>
<tr>
<td><strong>Specific Gravity/Density:</strong></td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Molecular Formula:</strong></td>
<td>No information found.</td>
</tr>
<tr>
<td><strong>Molecular Weight:</strong></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:**
Reducing agents, combustible materials, organic materials, metals.

**Hazardous Decomposition Products:**
Oxides of nitrogen.

**Hazardous Polymerization:**
Has not been reported

**Section 11 - Toxicological Information**

**RTECS:**
CAS# 7732-18-5: ZC0110000.
CAS# 7757-79-1: TT3700000.

**LD50/LC50:**
CAS# 7732-18-5:
- Oral, rat: LD50 = >90 mL/kg.

CAS# 7757-79-1:
- Oral, rabbit: LD50 = 1901 mg/kg
- Oral, rat: LD50 = 3750 mg/kg.

**Carcinogenicity:**
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7757-79-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

**Epidemiology:**
Potassium nitrate may cause irritation to eyes, mucous membrane, and skin.

**Teratogenicity:**
No information found.

**Reproductive:**
May cause adverse reproductive effects based on animal test data.
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Mutagenicity:
May affect genetic material.

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

<table>
<thead>
<tr>
<th>US DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
</tr>
<tr>
<td>Hazard Class:</td>
</tr>
<tr>
<td>UN Number:</td>
</tr>
<tr>
<td>Packing Group:</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

US Federal

TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 7757-79-1 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:
Potassium nitrate can be found on the following state Right-to-Know lists: New Jersey, Florida, Pennsylvania, Massachusetts.

California Regulations:
None.

European/International Regulations
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Canadian DSL/NDSL:
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 7757-79-1 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# 7757-79-1 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: August 15, 1998
Revision Date: April 26, 2010

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