SAFETY DATA SHEET
SODIUM NITRATE

Product No: 002/05-US

Section 1 : Identification of the Substance and of the Company

Product Name : Sodium Nitrate
Use of the Product : Product for agriculture or industrial use.
Supplier : SQM Northamerica Corporation
Address : 2727 Paces Ferry Road
Building Two, Suite 1425
Atlanta, GA 30339
Telephone : (770) 916 9400
Fax : (770) 916 9401
e-mail : product_safety@sqm.com
Emergency Number : (800) 424 9300 (CHEMTREC)

Section 2 : Hazards Identification

Emergency Overview
Oxidizer. Contact with combustible material will not cause spontaneous ignition. However, substance will enhance an existing fire (Class 1 oxidizer according to NFPA).

NFPA Ratings
Health : 1
Flammability : 0
Reactivity : 1
Special : Oxidizer

Potential Health Effects
Inhalation : Inhalation of dust irritates the respiratory tract. Symptoms may include coughing.
Ingestion : Hazardous in case of ingestion.
Skin Contact : May cause irritation, specially with wet skin.
Eye Contact : May cause irritation, eye redness, itching and pain.

Section 3 : Composition/Information on Ingredients

Chemical Name : Sodium Nitrate
CAS No. : 7631-99-4
EINECS No. : 231-554-3
Molecular Weight : 84.99
Formula : NaNO₃
Content : > 95%
**Section 4 : First Aid Measures**

**General Information**
In case of persisting adverse effects consult a physician.

**Specific Measures**

- **Inhalation**
  Remove to fresh air. Get medical attention for any breathing difficulty.

- **Ingestion**
  Induce vomiting. Never give anything by mouth (oral) to an unconscious person.

- **Skin Contact**
  In case of irritation, remove clothing. Wipe excess from skin. Wash with soap and water for at least 5 minutes.

- **Eye Contact**
  Flush eyes with plenty of water, lifting lower and upper eyelids occasionally.

**Section 5 : Firefighting Measures**

- **Fire**
  Non combustible, but contact with combustible substances under a fire will increase combustion rate. For thermal decomposition products, refer to Section 10.

- **Extinguishing Media**
  - **Suitable**
    Any means suitable for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water
  - **Not Suitable**
    -
  - **Protective equipment:**
    Refer to section 8.

**Section 6 : Accidental Release Measures**

- **Personal Precautions**
  Ventilate the area. Use personal protective equipment (Section 8).

- **Environmental Precautions**
  Do not discharge into drains. Avoid surface and ground water contamination.

- **Methods for Cleaning Up/Taking Up**
  Pick up the product mechanically and store in suitable containers for recovery or disposal.

**Section 7 : Handling and Storage**

- **Handling**
  Special Procedures: None
  Safe Handling Procedures
  Special Advices
  See Section 10.
Storage
Special Requirements  Reseal carefully any opened container and set upright to avoid leakages. Keep the product in the original containers.

Storage Conditions  Keep away from flammable substances. Do not store with combustibles reducing agents. Keep containers tightly closed in well ventilated and cool place.

Section 8 : Exposure Controls / Personal Protection

Exposure Limits
Suggested according to US regulations: 15 mg/m³ (total dust) ; 5 mg/m³ (respirable fraction)

Exposure Controls
Local exhaust ventilation to keep low dust environment.

Personal Protective Equipment
Respiratory  Dust mask if necessary, i.e. in case of dust emission or dusty environments

Eyes  Safety goggles required all the time.

Hands  Nitrile rubber gloves, over 0.11 mm thickness, > 480 min breakthrough time.

Hygiene Measures
Do not drink, eat or smoke during product manipulation. Keep away from foodstuffs and beverages. Wash hands before breaks and after work.

Section 9 : Physical and Chemical Properties

Physical Form  : Solid, prilled or crystalline
Color  : White
Odor  : Odorless
pH  : 6-9 (5% aqueous solution)
Melting Point  : 308°C
Boiling Point  : not applicable
Flash Point : not applicable  
Flammability : not flammable  
Explosive Properties : not applicable  
Thermal Decomposition : > 550°C  
Specific Gravity : 2.26 g/mL  
Water Solubility : 480 g/L (20 °C)  
Partition Coefficient (log P<sub>ow</sub>) : not applicable

**Section 10 : Stability and Reactivity**

**Stability**  
Stable under normal storage and temperature conditions.

**Conditions to avoid**  
Keep away from flammable, combustible and reducing substances.

**Hazardous Decomposition Products**  
Nitrous oxides, sodium nitrite and sodium oxide by thermal decomposition.

**Section 11 : Toxicological Information**

**Acute Data**
Oral LD<sub>50</sub> (rat) : > 2000 mg/Kg  
Dermal LD<sub>50</sub> (rat) : no data available  
Inhalation LC<sub>50</sub> : no data available

**Short-term Effects**
Inhalation may cause irritation of the respiratory tract. Can cause skin and eye irritation.

**Chronic Effects**
No adverse effects observed on developmental toxicity. Equivocal carcinogenic agent according to animal tests. Mutagenic and reproductive hazard at very high level doses according to animal tests.

**Section 12 : Ecological Information**

**General**
Do not discharge into drains and water or public depositories.

**Environmental Fate**
Sodium Nitrate dissociates into sodium and nitrate ions. Nitrates may be absorbed by plants and converted into organic nitrogen, whereas sodium binds to clay particles in the soil.
Zooplankton Toxicity  Fish Toxicity
Species: Daphnia magna  Species: Rainbow trout
LC50 3581 mg/L (48 h)  LC50 1658 mg/L (96 h)

Not acutely toxic to aquatic organisms.

**Mobility**
Predicted Distribution: Water, 45%; Soil, 54.7%

### Section 13: Disposal Considerations

<table>
<thead>
<tr>
<th>Residues</th>
<th>Licensed professional waste disposal service is required. Disposal of waste according to all federal, state and local regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empty Packaging</td>
<td>Empty containers may be reused after appropriate cleansing. Packaging that can not be cleaned should be disposed in agreement with the regional waste disposal company.</td>
</tr>
</tbody>
</table>

### Section 14: Transport Information

<table>
<thead>
<tr>
<th>Rail &amp; Road (DOT) – Sea (IMDG Code) – Air (IATA)</th>
<th>Sodium Nitrate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>1498</td>
</tr>
<tr>
<td>UN Number</td>
<td>5.1</td>
</tr>
<tr>
<td>Class</td>
<td>III</td>
</tr>
<tr>
<td>Packaging Group</td>
<td>Oxidizing</td>
</tr>
</tbody>
</table>

### Section 15: Regulatory Information

**US Classification**

<table>
<thead>
<tr>
<th>Indication of Danger</th>
<th>Oxidizing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk statements</td>
<td>Contact with combustible material under a fire will enhance combustion.</td>
</tr>
<tr>
<td>Safety Statements</td>
<td>Keep away from combustible material. Avoid contact with skin and eyes.</td>
</tr>
<tr>
<td>SARA</td>
<td>Not listed</td>
</tr>
<tr>
<td>TSCA</td>
<td>Listed</td>
</tr>
<tr>
<td>Prop. 65 (California)</td>
<td>Not listed</td>
</tr>
</tbody>
</table>
Section 16 : Other Information


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