Material Safety Data Sheet
Sodium Nitrate

ACC# 21400

Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium Nitrate
Catalog Numbers: S71996, S71997, S71998, S78698, S78699, BP360 500, BP360-500, BP360500, S342 3, S342-3, S3423, S343 3, S343 500, S343-10, S343-3, S343-500, S3433, S343500, S71998-1
Synonyms: Nitratis, soda niter, chile saltpeter
Company Identification:
   Fisher Scientific
   1 Reagent Lane
   Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-99-4</td>
<td>Sodium nitrate</td>
<td>100</td>
<td>231-554-3</td>
</tr>
</tbody>
</table>

Hazard Symbols: O
Risk Phrases: 8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colourless. **Danger!** Oxidizer. May be harmful if swallowed. Causes eye and skin irritation. Causes digestive and respiratory tract irritation.
Target Organs: None.

Potential Health Effects

Eye: Causes eye irritation.
Skin: Causes skin irritation.
Ingestion: Ingestion of large amounts may cause gastrointestinal irritation.
Inhalation: May cause respiratory tract irritation. May cause methemoglobinemia, cyanosis, convulsions, tachycardia, dyspnea, and death.
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. Get medical aid.
Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid. Induce vomiting by giving one teaspoon of Syrup of Ipecac.
Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
Notes to Physician: Treat symptomatically and supportively.
Antidote: None reported.

Section 5 - Firefighting Measures

General Information: Strong oxidizer. Contact with combustible materials may cause a fire. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.
Extinguishing Media: Use water only!
Autoignition Temperature: Not available.
Flash Point: Not available.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid contact with clothing and other combustible materials.
Storage: Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.
Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Sodium nitrate: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear safety glasses and chemical goggles if splashing is possible.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** Colourless

**Odor:** Odorless

**pH:** 7.0

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:**

**Viscosity:** Not available.

**Boiling Point:** 716 deg F

**Freezing/Melting Point:** 586 deg F

**Decomposition Temperature:** 716 deg F

**Solubility:** Soluble in water

**Specific Gravity/Density:** 2.26

**Molecular Formula:** NaNO3

**Molecular Weight:**

Section 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials, combustible materials, reducing agents, strong acids.

**Incompatibilities with Other Materials:** Oxidizable materials, including barium rhodanide, antimony, boron phosphate, cyanides, sodium hypophosphate, sulfur plus charcoal, powdered aluminum or aluminum oxide, sodium thiosulphate, metal sulfides, sodium acetate, fluorine, zinc, and trichloroethylene.

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

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

Section 11 - Toxicological Information

**RTECS#:**

**CAS# 7631-99-4:** WC5600000

**LD50/LC50:**

**CAS# 7631-99-4:**
Oral, rabbit: LD50 = 2680 mg/kg;
Oral, rat: LD50 = 1267 mg/kg.

Carcinogenicity:
CAS# 7631-99-4: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Neurotoxicity: No data available.
Mutagenicity: No data available.
Other Studies: No data available.

**Section 12 - Ecological Information**

Ecotoxicity: This material will not cause oxygen depletion in aquatic systems. It has a low potential to affect aquatic organisms, secondary waste treatment microorganisms, and the growth of some plants. It has a moderate potential to affect the germination of some plants. Acute aquatic effects: 96-hour LC50;
Fathead minnow: GT 1000 mg/L 96-hour LC50; Water flea: GT 1000 mg/L
Environmental Fate: This chemical is not likely to bioconcentrate.
Physical/Chemical: No information found.
Other: No information found.

**Section 13 - Disposal Considerations**

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants: None listed.
RCRA D-Series Chronic Toxicity Reference Levels: None listed.
RCRA F-Series: None listed.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**Section 14 - Transport Information**

<table>
<thead>
<tr>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Cana TD</th>
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<tr>
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<td>No information available.</td>
<td>No information available. SODIUM NITRATE</td>
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<td>Hazard Class:</td>
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<tr>
<td>UN Number:</td>
<td>UN1500</td>
<td></td>
<td></td>
<td>UN1498</td>
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<tr>
<td>Packing Group:</td>
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<td>III</td>
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</tbody>
</table>

**Section 15 - Regulatory Information**

**US FEDERAL**

**TSCA**
CAS# 7631-99-4 is listed on the TSCA inventory.

**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)
None of the chemicals in this material have an RQ.

Section 302 (TPQ)
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 7631-99-4: flammable.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 7631-99-4 can be found on the following state right to know lists: New Jersey, Florida, Pennsylvania, Massachusetts.
California No Significant Risk Level: None of the chemicals in this product are listed. European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
O

Risk Phrases:
R 8 Contact with combustible material may cause fire.

Safety Phrases:

WGK (Water Danger/Protection)
CAS# 7631-99-4: 1

Canada
CAS# 7631-99-4 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of C, D2B.
CAS# 7631-99-4 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

Section 16 - Additional Information

MSDS Creation Date: 12/19/1994
Revision # Date: 12/12/1997
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

Need help with a product? Send email to Fisher's customer service or call us at 1-800-766-7000.