

Safety Data Sheet

Sodium Nitrate

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Sodium Nitrate
Recommended Use: Science education applications
Synonyms: Sodium (I) Nitrate; nitric acid, sodium salt; soda niter; Chile saltpeter
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING



May intensify fire; oxidizer. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

GHS Classification:

Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Oxidizing Solid Category 3, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3, Acute Toxicity - Oral Category 4

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| Sodium Nitrate | 7631-99-4 | 100 |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5 Firefighting Procedures

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Product is a strong oxidizer. Contact with combustible materials, flammable materials, or powdered metals can cause fire or explosion. Can react violently with reducing agents. Risk of explosion by shock, friction, fire or other sources of ignition.
Hazardous Combustion Products: Sodium Oxides, Nitrogen containing gases

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Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Avoid the generation of dusts during clean-up.

Environmental Precautions:

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container Do not flush to sewer. Avoid runoff into storm sewers and ditches that lead to waterways.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7

Handling and Storage

Handling:

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep/Store away from clothing/.../combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-ventilated place. This material should be kept in an area suitable for the storage of flammable liquids. Store away from oxidizing agents, sparks and flame.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code:

Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8

Protection Information

Chemical Name

No data available

ACGIH
(TWA)
N/A

(STEL)
N/A

OSHA PEL
(TWA)
N/A

(STEL)
N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use. Ventilation should effectively remove and prevent buildup of any vapor/mist/fume generated from the handling of this product.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

Respiratory protection will be required when handling this product. Use respirators only if ventilation cannot be used to eliminate symptoms or reduce the exposure to below acceptable levels. If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.

Respirator Type(s):

Wear a NIOSH/MSHA-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Nitrile

Section 9

Physical Data

Formula: NaNO₃

Molecular Weight: 84.99

Appearance: White Crystalline Solid

Odor: No data available

Odor Threshold: No data available

pH: 9 at 100 g/l at 20 °C

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: 2.26

Solubility in Water: Soluble

Log Pow (calculated): No data available

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Melting Point: No data available 308 C
Boiling Point: No data available 380 C
Flash Point: No data available
Flammable Limits in Air: N/A

Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity: No data available
Chemical Stability: High temperatures
Conditions to Avoid: None known.
Incompatible Materials: Cyanide Salts, Metals (powdered), Strong acids, Strong reducing agents, Alkali and Alkaline Metals, Organic Compounds
Hazardous Decomposition Products: Nitrogen containing gases, Sodium Oxides
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Respiratory disorders, , Eye disorders, Gastrointestinal,
Delayed Effects: No data available

Acute Toxicity:

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------|------------|--|----------------|-----------------|
| Sodium Nitrate | 7631-99-4 | Oral LD50 Mouse 3500 mg/kg Oral LD50 Rabbit 2680 mg/kg Oral LD50 Rat 1267 mg/kg | Not determined | Not determined |

Carcinogenicity:

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|----------------|------------|--------|------------|------------|
| Sodium Nitrate | 7631-99-4 | Listed | Not listed | Not listed |

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2
Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

| Chemical Name | CAS Number | Eco Toxicity |
|----------------|------------|---|
| Sodium Nitrate | 7631-99-4 | 96 HR LC50 LEPOMIS MACROCHIRUS 2000 MG/L [STATIC] |

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

Air - IATA Proper Shipping Name:

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UN number: 1498 Class: 5.1 Packing group: III Proper shipping name: Sodium nitrate Marine pollutant: No Poison Inhalation Hazard: No

UN number: 1498 Class: 5.1 Packing group: III Proper shipping name: Sodium nitrate

Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|-------------------|------------|------------|----------|-----------|-----------|---------------|
| No data available | 7631-99-4 | No | No | No | No | No |

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 08/27/2014

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

| | | | |
|--------|---|------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |