

2/24/2025: File reviewed; more current MSDS/SDS not available. CAS

## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Sodium Nitrate

Signal Word  
**WARNING**

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-10337

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 3). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).



Hazard class: Eye irritation (Category 2A). Causes serious eye irritation (H319).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Sodium nitrate	7631-99-4	NaNO <sub>3</sub>	84.99	
Synonyms: Chile saltpeter				

### SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Get medical advice or attention (P308+P313).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin:** Rinse cautiously with water for several minutes (P351).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

NFPA Code

Strong oxidizer. Fire and explosion risk when in contact with combustible materials.

None established

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

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**SECTION 6 — ACCIDENTAL RELEASE MEASURES**

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Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides. Store in a cool dry place. Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, eye protection, and face protection (P280). Wash hands thoroughly after handling (P264).

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless transparent crystals. Odorless.	Boiling point: 380 °C (decomposes)
Soluble: Water and glycerol. Slightly in alcohol.	Melting point: 306.5 °C
	Specific gravity: 2.261
	Viscosity: 3.85 cP at 590 K

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong reducers, strong acids, combustible materials, finely powdered metals, friction and shock. Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Toxic, irritant.	ORL-RAT LD <sub>50</sub> : 1267 mg/kg
Chronic effects: Anemia, methemoglobinemia, nephritis.	IHL-RAT LC <sub>50</sub> : N.A.
Target organs: Blood, central nervous system.	SKN-RBT LD <sub>50</sub> : N.A.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #26b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Sodium nitrate. Hazard class: 5.1, Oxidizer. UN number: UN1498. Packing group: III

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-554-3), RCRA code D001.

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**SECTION 16 — OTHER INFORMATION**

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

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