

2/10/2025: File reviewed, more current MSDS/SDS not available. CAS

## Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Potassium Nitrate

Signal Word  
**WARNING**

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

Chemtrec Emergency Phone Number: (800) 424-10170

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 5). May be harmful if swallowed (H303).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Potassium nitrate	7757-79-1	KNO <sub>3</sub>	101.11	
Synonyms: Saltpeter; Nitrate of potash				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**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:** Wash with plenty of water.

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Strong oxidizer. Dangerous fire risk if shocked or heated. Avoid contact with organic materials.

NFPA Code

Potassium nitrate decomposes on heating producing nitrogen oxides, oxygen, which increases fire hazard

H: 1

F: 0

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

R: 0

Hazardous combustion products: Not combustible but enhances combustion of other substances.

OX

Gives off irritating or toxic fumes (or gases) in a fire.

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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.

Slightly hygroscopic. Store in a Flinn Chem-Saf™ bag 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, and eye protection (P280). Wash hands thoroughly after handling.

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## **SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Transparent, colorless crystals or powder. Odorless.

Melting point: 333 °C Boiling point: 400 °C

Soluble: Water and glycerin. Slightly in alcohol.

(decomposes)

Specific gravity: 2.1062

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## **SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong reducers, finely powdered metals, strong acids, organic and combustible materials.

Shelf life: Good, slightly hygroscopic. See Section 7 for further information.

Hazardous decomposition products: KNO<sub>3</sub> decomposes on heating producing nitrogen oxides, oxygen, which increases fire hazard

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## **SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant

ORL-RAT LD<sub>50</sub>: 3750 mg/kg

Chronic effects: N.A.

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: Potassium Nitrate. Hazard class: 5.1, Oxidizer. UN number: UN1486.

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## **SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-818-8), RCRA code D001.

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## **SECTION 16 — OTHER INFORMATION**

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PRODUCT(S).

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.**

**Revision Date:** March 31, 2016

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