SDS #: 640
Revision Date: March 31, 2016

Potassium Nitrate 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

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).

Pictograms

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Potassium nitrate Synonyms: Saltpeter; Nitrate of potash	7757-79-1	KNO_3	101.11	

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.
Potassium nitrate decomposes on heating producing nitrogen oxides, oxygen, which increases fire hazard
In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code
H: 1
F: 0
R: 0
OX

Hazardous combustion products: Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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.

SECTION 7 — HANDLING AND STORAGE

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).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Transparent, colorless crystals or powder. Odorless.
Soluble: Water and glycerin. Slightly in alcohol.

Melting point: 333 °C Boiling point: 400 °C (decomposes)
Specific gravity: 2.1062

SECTION 10 — STABILITY AND REACTIVITY

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_3 decomposes on heating producing nitrogen oxides, oxygen, which increases fire hazard

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant
Chronic effects: N.A.
Target organs: Blood, central nervous system

ORL-RAT LD_{50}: 3750 mg/kg
IHL-RAT LC_{50}: N.A.
SKN-RBT LD_{50}: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

SECTION 14 — TRANSPORT INFORMATION

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

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

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STORAGE, USE OR DISPOSAL OF THIS 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.

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