

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 640.00

Revision Date: December 22, 2010

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Potassium Nitrate

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

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Potassium Nitrate

CAS#: 7757-79-1

### SECTION 3 — HAZARDS IDENTIFICATION

Transparent, colorless crystals or powder. Odorless.  
Slightly toxic by ingestion. Irritating to body tissues. Avoid body tissue contact.  
Chronic exposure to small amounts can cause anemia, nephritis, methemoglobinemia.  
Strong oxidizer: Fire risk when in contact with combustible materials.

#### FLINN AT-A-GLANCE

Health-1  
Flammability-0  
Reactivity-3  
Exposure-1  
Storage-1

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician, seek medical attention for further treatment, observation and support after first aid.  
Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.  
Eye: Immediately flush with fresh water for 15 minutes.  
External: Wash continuously with fresh water for 15 minutes.  
Internal: Rinse out mouth, give 1 to 2 cups of water or milk, induce vomiting. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.  
Strong oxidizer. Dangerous fire risk if shocked or heated. Avoid contact with organic materials.  
When heated to decomposition, emits toxic fumes of NO<sub>x</sub> and K<sub>2</sub>O.

#### NFPA CODE

None  
established

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. 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 and nitrites.  
Store in a cool dry place. Use and dispense in a hood. Store in a Flinn Chem-Saf Bag.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Transparent, colorless crystals or powder. Odorless.

Solubility: Soluble in water; slightly in alcohol.

Formula: KNO<sub>3</sub>

Formula Weight: 101.11

Melting Point: 333 °C

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.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant

Chronic effects: N.A.

Target organs: Blood, central nervous system

ORL-RAT LD<sub>50</sub>: 3750 mg/kgIHL-RAT LC<sub>50</sub>: N.A.SKN-RBT LD<sub>50</sub>: N.A.

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

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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 consult with state and local regulations.

Flinn Suggested Disposal Method #26a 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

N/A = Not applicable

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