

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 642.00

Revision Date: January 20, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Potassium Nitrite

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#: 7758-09-0

SECTION 3 — HAZARDS IDENTIFICATION

Pale yellow crystalline powder. Odorless.

Highly toxic by ingestion and inhalation. Irritating to body tissues. Avoid all body tissue contact.

Strong oxidizer. Chronic exposure produces methemoglobinemia, nausea, vomiting, rapid pulse, headache and visual disturbances.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-3

Exposure-1

Storage-3

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: Give large quantities of water. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Use a triclass, dry chemical fire extinguisher.

Strong oxidizer. Dangerous fire or explosion risk if shocked or heated, or in contact with organic materials.

When heated to decomposition, emits toxic fumes of K_2O and NO_x .

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

NFPA CODE

None
established

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. Deliquescent, store in Flinn Chem-Saf Bag. Store in a poisons cabinet. Use and dispense in a hood.

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.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White or slightly yellow prisms or sticks.
Solubility: Soluble in water; slightly in alcohol.
Formula: KNO_2
Formula Weight: 85.11

Melting Point: 440 °C (decomposition starts at 350 °C).
Specific Gravity: 1.915

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong reducers, finely powdered metals, strong acids, organic materials, heat, open flame or any source of ignition.

Shelf life: Good; slightly hygroscopic

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, irritant
Chronic effects: N.A.
Target organs: Blood, smooth muscle

ORL-RBT LD₅₀: 200 mg/kg
IHL-MUS LC₅₀: 85 g/m³/2H
SKN-RBT LD₅₀: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please consult with state and local regulations.
Flinn Suggested Disposal Method #12b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Potassium Nitrite
Hazard Class: 5.1, Oxidizer
UN Number: UN1488
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-832-4), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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