

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 543.00

Revision Date: December 7, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Nickel 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

Nickel nitrate, hexahydrate

Synonyms: Nickel(II) nitrate, Nickelous nitrate, Nickel dinitrate

CAS#: 13478-00-7

### SECTION 3 — HAZARDS IDENTIFICATION

Green, deliquescent crystals. Odorless.

Nickel compounds are known human carcinogens by inhalation of dust (IARC-1). Slightly toxic by ingestion and inhalation. Irritating to body tissues. Avoid all body tissue contact.

#### FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-3

Exposure-1

Storage-1

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and 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 or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Strong oxidizer. Dangerous fire risk when in contact with combustible materials. When heated to decomposition, emits toxic fumes of NO<sub>x</sub>.

#### NFPA CODE

None

established

**Fire Fighting Instructions:** Use a 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 the area. Sweep up the spill, place in a 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 a Flinn Chem-Saf Bag. 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 a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: PEL 1 mg/m<sup>3</sup> (as Ni) (OSHA)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Green, deliquescent, odorless crystals.

Solubility: Soluble in water, alcohol, and ammonium hydroxide.

Formula:  $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$

Formula weight: 290.82

Boiling point: 136.7 °C

Melting point: 55 °C

Specific gravity: 2.065

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with strong reducers and strong acids.

Shelf life: Poor, deliquescent.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Sensitizer, irritant

Chronic effects: Known carcinogen by dust inhalation.

Target organs: Lungs

ORL-RAT LD<sub>50</sub>: 1620 mg/kg

IHL-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.

**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 #27f is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Nickel Nitrate

Hazard class: 5.1, Oxidizer

UN number: UN2725

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (236-068-5), 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.**