FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

Section 1 — Chemical Product and Company Identification

Nickel Ammonium Sulfate

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 Ammonium Sulfate Synonym: nickelous ammonium sulfate

CAS#: 15699-18-0

Section 3 — Hazards Identification

Blue-green crystals; odorless.

Nickel compounds are known carcinogens by inhalation of dust. Moderately toxic by ingestion and inhalation. Avoid inhalation of dust. Irritating to skin and eyes. Avoid body tissue contact.

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

Not combustible solid. When heated to decomposition, emits toxic fumes of NOx, SOx and Ni. **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 #2. Store with acetates, halides, sulfates, sulfates, thiosulfates and phosphates.

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 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: TWA 1 mg/m3 (Ni) (OSHA)

FLINN AT-A-GLANCE Health-2 Flammability-0 Reactivity-0

Exposure-1 Storage-0

0 is low hazard, 3 is high hazard

NFPA Code None Established

PAGE 1 OF 2

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Section 9 — Physical and Chemical Properties

Blue-green crystals; odorless. Solubility: Soluble in water. Insoluble in alcohol. Formula: Ni(NH4)2(SO4)2 6H2O Formula Weight: 395.00

Section 10 — Stability and Reactivity

Avoid heat. Decomposed by elevated temperature. Shelf Life: Indefinite.

Section 11 — Toxicological Information

Acute effects: Irritant, harmful dust Chronic effects: N.A. Target organs: 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 #27f is one option.

Section 14 — Transport Information

Shipping Name: Not regulated Hazard Class: N/A UN Number: N/A

N/A = Not applicable

Section 15 — Regulatory Information

Not listed.

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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Questions on Chemical Disposal or Storage?--Call Flinn

> flinn@flinnsci.com www.flinnsci.com P.O. Box 219 Batavia IL 60510 (800) 452-1261 Fax (866) 452-1436

ORL-RAT LD50: N.A. IHL-RAT LC50: N.A. SKN-RBT LD50: N.A.

Nickel Ammonium Sulfate

Specific Gravity: 1.929