FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

Section 1 — Chemical Product and Company Identification

Ammonium Metavanadate Solution

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

Ammonium Metavanadate (7803-55-6) 1%, Sulfuric Acid (7697-37-2) 5%, Sodium Hydroxide (1310-73-2) <1%, and Water (7732-18-5) 93%

CAS#: None established.

Section 3 — Hazards Identification

Yellow odorless solution. Corrosive to body tissues. Moderately toxic by ingestion. Avoid all body tissue contact.

Health-2 Flammability-0 Reactivity-0 Exposure-2 Storage-0

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

Non-flammable liquid. When heated to decomposition, emits toxic fumes of NH3 and NOx. 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 and ventilate area. Contain spill with sand or absorbent material; deposit in sealed bag or container. 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.

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.

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MSDS #: 59.10 Revision Date: March 15, 2001

FLINN AT-A-GLANCE

NFPA CODE None established

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Section 9 — Physical and Chemical Properties

Yellow solution. Odorless. Solution contains ammonium metavanadate, sulfuric acid, sodium hydroxide, and distilled water.

Section 10 — Stability and Reactivity

When heated to decomposition, emits toxic fumes of NH3 and NOx. Shelf life: Indefinite.

Section 11 — Toxicological Information

Acute effects: Toxic, severe eye irritant, corrosive Chronic effects: Possible mutagen Target organs: N.A. Severe overexposure may result in greenish-black discoloration.

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

Section 12 — Ecological Information

Data not yet available.

<u>Section 13 — Disposal Considerations</u>

Please consult with state and local regulations. Flinn Suggested Disposal Method #27d 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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ORL-RAT LD50: 160 mg/kg as Ammonium Metavanadate IHL-RAT LC50: N.A. SKN-RBT LD50: N.A.