# FLINN SCIENTIFIC, INC. **Material Safety Data Sheet (MSDS)**

MSDS #: 46 00

**Revision Date:** December 14, 2011

#### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

# **Ammonia**

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 hydroxide (1336-21-6) 8-10% and Water (7732-18-5) 90-92%

Synonym: household ammonia, ammonia solution, aqueous ammonia

CAS#: None established

### **SECTION 3 — HAZARDS IDENTIFICATION**

White cloudy solution. Strong ammonia odor.

Mildly toxic by ingestion and inhalation. Irritating to body tissues. Lachrymator.

Avoid all body tissue contact.

FLINN AT-A-GLANCE

Health-2 Flammability-0

Reactivity-1

Exposure-2

Storage-3

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: Do NOT induce vomiting. Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

#### **SECTION 5 — FIRE FIGHTING MEASURES**

Nonflammable, noncombustible solution.

When heated to decomposition, emits toxic fumes of NH<sub>3</sub> and NO<sub>x</sub>.

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and

SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None established

#### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area and ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

#### **SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store in a dedicated base cabinet. If a cabinet is not available, store in a Flinn Saf-Cube.

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. Exposure guidelines: PEL 50 ppm (OSHA).

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### **SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Household ammonia. Normally an 8-10% aqueous solution of ammonium hydroxide.

Melting point: -77 °C Specific gravity: 0.90

### **SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with acids, copper, copper alloys, galvanized iron, and aluminum. Shelf life: Indefinite, if stored properly.

### **SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Toxic, corrosive, lachrymator. ORL-RAT  $LD_{50}$ : N.A. Chronic effects: N.A. IHL-RAT  $LC_{50}$ : N.A. Target organs: N.A. SKN-RBT  $LD_{50}$ : 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 #26b 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

TSCA-listed, EINECS-listed (215-647-6). RCRA D002

### **SECTION 16 — OTHER INFORMATION**

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