

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 46.00

Revision Date: February 24, 2003

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%, Water (7732-18-5) 90-92%

Synonym: household ammonia, ammonia solution, aqueous ammonia

CAS#: None Established

Section 3 — Hazards Identification

White cloudy liquid with 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, 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, non combustible.

When heated to decomposition, emits toxic fumes of NH₃ and NO_x.

Fire Fighting Instructions: Use 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 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 #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.

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

Ammonia

MSDS #: 46.00

Revision Date: February 24, 2003

Section 9 — Physical and Chemical Properties

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

Specific Gravity: .90
Melting Point: -77C

Section 10 — Stability and Reactivity

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

Section 11 — Toxicological Information

Acute effects: Toxic, corrosive, lachrymator
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: N.A.
IHL-RAT LC50: N.A.
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 #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

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.

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Flinn--"Your Safer Source for Chemicals"

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