

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 61.00

Revision Date: March 7, 2001

Section 1 — Chemical Product and Company Identification

Ammonium 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

Ammonium Nitrate

Synonym: nitric acid, ammonium salt

CAS#: 6484-52-2

Section 3 — Hazards Identification

White, odorless crystals.

Strong oxidizer; may explode if heated under confinement; will explode at temperatures of 210 C; explodes more readily if contaminated with combustible material.

Slightly toxic by ingestion. Irritating to body tissues. Avoid all body tissue contact.

FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-3

Exposure-1

Storage-2

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 solid.

May explode under confinement and high temperatures or if exposed to reducing agents.

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

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

H-0

F-0

R-3

OX

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and water. 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 #8. Store with borates, chromates, manganates and permanganates.

Store away from all combustibles.

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.

Section 9 — Physical and Chemical Properties

White, odorless crystals.
Solubility: Water soluble (100%), alcohol and alkalies.
Formula: NH₄NO₃
Formula Weight: 80.06

Specific Gravity: 1.725
Melting Point: 170 C
Boiling Point: 210 C (dec.)

Section 10 — Stability and Reactivity

Store away from any source of combustion or ignition. Avoid contact with reducing agents, strong acids, finely powdered metals, and organic materials. Do not grind in motor and pestle –potentially shock sensitive.
Shelf life: Good, if stored safely.

Section 11 — Toxicological Information

Acute effects: Irritant, gastrointestinal disturbances
Chronic effects: N.A.
Target organs: Blood, central nervous system

ORL-RAT LD50: 2217 mg/kg
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: Ammonium Nitrate
Hazard Class: 5.1, Oxidizer
UN Number: UN1942

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (229-347-8), RCRA code D001, D003.

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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