

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

BOVA SUPPLY CENTER  
02-15532

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<sub>x</sub> and NH<sub>3</sub>.  
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: NH<sub>4</sub>NO<sub>3</sub>

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 mortar 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**

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