

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 327.00

Revision Date: March 8, 2001

Section 1 — Chemical Product and Company Identification

Ethylenediamine

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

Ethylenediamine

CAS#: 107-15-3

Section 3 — Hazards Identification

Clear, colorless liquid; ammonia odor; strong base.
Moderately toxic by ingestion, inhalation and skin absorption; severe irritant to skin and eyes.
Substance is caustic and corrosive. Avoid all body tissue contact.
Flammable liquid.

FLINN AT-A-GLANCE

Health-3
Flammability-3
Reactivity-2
Exposure-3
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

Class 1C Flammable liquid.
Flash Point: 93 F Upper: 16% Lower: 2.7% Autoignition Temperature: 715%
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

H-3
F-2
R-0

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand and 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: Organic #2. Store with alcohols, glycols, amines and amides.
Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can. Keep container tightly closed. Absorbs carbon dioxide from air, keep tightly closed and stored in a Flinn Chem-Saf bag.
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 ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).
Exposure guidelines: TWA 10 ppm, (OSHA).

Section 9 — Physical and Chemical Properties

Clear, colorless liquid; ammonia odor strong base.

Solubility: Soluble: water and alcohol.

Formula: H₂NCH₂CH₂NH₂

Formula Weight: 60.10

Specific Gravity: 0.9089

Melting Point: 8.5 C

Section 10 — Stability and Reactivity

Avoid contact with acids, acid chlorides, oxidizers, acid anhydrides, phosphous halides, heat, open flame or any source of ignition. Shelf life: Potentially poor, absorbs carbon dioxide from air, keep tightly closed and stored in a Flinn Chem-Saf bag.

Section 11 — Toxicological Information

Acute effects: Toxic, corrosive, lachrymator, sensitizer, stomach pains, vomiting, diarrhea

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD50: 500 mg/kg

IHL-RAT LC50: 300 mg/m³

SKN-RBT LD50: 730 mg/kg

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: Ethylenediamine

Hazard Class: 8, Corrosive, flammable liquid.

UN Number: UN1604

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (203-468-6), RCRA code D001.

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"

Improve Safety--Use Flinn Chemicals

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