

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 327.00

Revision Date: December 13, 2013

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

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral and dermal (Category 4). Harmful if swallowed or in contact with skin (H302+H312). Do not eat, drink, or smoke when using this product (P270).

Hazard class: Sensitization, skin and respiratory tract (Category 1). May cause an allergic skin reaction, allergy or asthma symptoms or breathing difficulties if inhaled (H317+H334). Avoid breathing mist, vapors or spray (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ethylenediamine	107-15-3	H ₂ NCH ₂ CH ₂ NH ₂	60.10	

Synonyms: 1,2-Diaminoethane, 1,2-Ethanediamine

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician (P311). **If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If experiencing respiratory symptoms:** Call a POISON CENTER or physician (P342+P311). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If skin irritation or rash occurs:** Get medical advice or attention (P333+P313). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Class 1C flammable liquid.

Flash point: 43 °C Lower: 1.1% Upper: 5.8% Autoignition Temperature: 385 °C

When heated to decomposition, may emit toxic fumes.

In case of fire: Use tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-3

F-2

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert 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: 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. Absorbs carbon dioxide from air, keep container tightly closed (P233) and store in a Flinn Chem-Saf™ bag. Keep cool (P235).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Contaminated work clothing should not be allowed out of the workplace (P272). In case of inadequate ventilation, wear respiratory protection (P285). Exposure guidelines: PEL/TLV 25 mg/m³ (OSHA, ACGIH), Readily absorbed through the skin.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless liquid. Ammonia odor. Strong base.
Soluble: Water and alcohol

Boiling point: 117 °C
Melting point: 11 °C
Refractive index: 1.4565
Specific gravity: 0.8979

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids, acid chlorides, oxidizers, acid anhydrides, phosphorus halides, heat, open flame, or any source of ignition.

Shelf life: Poor, absorbs carbon dioxide from air, keep container tightly closed. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Skin and respiratory tract irritation, sensitization dermatitis, asthma.

Chronic effects: Liver, kidney damage.

Target organs: Skin, respiratory system, liver, kidneys.

ORL-RAT LD₅₀: 1200 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 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: 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

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