



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
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Safety Data Sheet (MSDS)

(According to GB/T 16483, GB/T 17519, and GHS Standards)

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: Ethylenediamine (EDA)
- Product Number: EDA-20260316
- Brand: TECHPURE
- CAS-No.: 107-15-3
- Synonyms: 1,2-Diaminoethane; Ethylene diamine

1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

1.3 Emergency telephone

Emergency Phone # : +86-021-50350029
(CHEMTREC)

1.4 Uses & Restrictions

- Identified Uses: Chemical synthesis intermediate, polymer crosslinker, chelating agent.
- Uses Advised Against: Food contact, medicinal purposes, unventilated enclosed space use.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Flammable liquids (Category 3)
- Acute toxicity - Inhalation (Category 3)
- Skin corrosion/irritation (Category 1)
- Eye damage/eye irritation (Category 1)
- Aquatic toxicity (Category 1)

2.2 GHS Label Elements

- Hazard Pictogram: Flame; Skull and crossbones; Corrosion; Environment
- Signal Word: Danger
- Hazard Statements: H226 (Flammable liquid and vapor); H331 (Toxic if inhaled); H314 (Causes severe skin burns and eye damage); H400 (Very toxic to aquatic life)
- Precautionary Statements: P210 (Keep away from heat/sparks); P260 (Do not breathe vapor); P280 (Wear protective gloves/eye/face/respiratory protection); P304+P340 (If inhaled: Remove to fresh air)

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Pure substance
- Active Component: Ethylenediamine (CAS 107-15-3)
- Concentration: $\geq 99.0\%$
- Impurities: $\leq 1.0\%$ (Water, diethylenetriamine)

SECTION 4: First Aid Measures

- Inhaled: Move to fresh air; give oxygen if needed; seek emergency medical attention.
- Skin Contact: Rinse with running water for 15-20 minutes; remove contaminated clothing.
- Eye Contact: Rinse with plenty of water for 15 minutes; seek emergency medical attention.
- Swallowed: Do not induce vomiting; rinse mouth with water; seek immediate medical attention.

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Dry powder, CO₂, foam, water spray.
- Special Hazards: Flammable vapor; toxic fumes (NO_x) when burned; corrosive to metals.
- Advice for Firefighters: Wear self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental Release Measures

- Personal Precautions: Evacuate non-essential personnel; wear full PPE; eliminate ignition sources.
- Environmental Precautions: Prevent entry into drains/watercourses; neutralize with acid absorbents.
- Clean-Up Methods: Small spills: Absorb with inert materials; large spills: Contain and transfer to sealed containers.

SECTION 7: Handling and Storage

- Handling: Operate in well-ventilated areas with corrosion-resistant equipment; use anti-static tools.
- Storage: Cool, dry, well-ventilated warehouse ($\leq 30^{\circ}\text{C}$); sealed, away from heat/sparks/oxidizers/acids.
- Incompatibilities: Strong acids, oxidizing agents, metals.

SECTION 8: Exposure Controls/Personal Protection

- PPE: Chemical safety goggles/face shield; nitrile rubber gloves; chemical-resistant clothing; organic vapor respirator (P100).
- Exposure Limits: TWA (8h): 10 ppm (OSHA); STEL (15min): 25 ppm (OSHA).

SECTION 9: Physical and Chemical Properties

- Physical State: Liquid; Color: Colorless to pale yellow; Odor: Ammonia-like
- Melting Point: 8.5°C ; Boiling Point: 117°C ; Flash Point: 33°C
- Density (20°C): 0.899 g/cm^3 ; Viscosity (20°C): $1.6\text{ mPa}\cdot\text{s}$
- Water Solubility: Fully miscible; Vapor Pressure (25°C): 1.4 kPa

- Explosive Limits: 5.8-11.1% (v/v); Autoignition Temperature: 385°C

SECTION 10: Stability and Reactivity

- Stability: Stable under normal conditions.
- Hazardous Reactions: Reacts violently with strong acids/oxidizers; reacts with metals to release hydrogen gas.
- Conditions to Avoid: Heat, sparks, open flames, strong acids.

SECTION 11: Toxicological Information

- Acute Toxicity: Oral (Rat, LD₅₀): 1290 mg/kg; Inhalation (Rat, LC₅₀): 1800 ppm (4h)
- Skin/Eye Corrosion: Severe skin burns; permanent eye damage risk.
- Chronic Toxicity: Long-term exposure may cause respiratory and liver/kidney damage.

SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Zebrafish, LC₅₀): 50 mg/L (96h); Daphnia (EC₅₀): 80 mg/L (48h)
- Biodegradability: Moderately biodegradable (BOD₅ /COD = 0.3-0.4)

SECTION 13: Disposal Considerations

- Product Waste: Dispose as hazardous waste; neutralize with acid before disposal.
- Packaging Waste: Rinse with water; dispose as hazardous waste or recycle.

SECTION 14: Transport Information

- UN Number: 1604
- UN Proper Shipping Name: ETHYLENEDIAMINE
- Transport Hazard Class: 8 (Corrosive substances) + 3 (Flammable liquid)
- Packaging Group: II
- Marine Pollutant: Yes

SECTION 15: Regulatory Information

- National Regulations: Hazardous Chemical Safety Management Regulation; Environmental Protection Law.
- International Regulations: GHS (Rev. 9); REACH (EU, listed); TSCA (US, listed); IMDG Code.

SECTION 16: Other Information

- Revision Date: 16 MAR 2026
- Disclaimer: This MSDS is based on current data; supplier not liable for improper use.