

N,N-Dimethyl Aminoethyl Acrylate (DA) MSDS

Section 1: Product Name and Identification

- **Product Name:** [N,N-Dimethyl Aminoethyl Acrylate \(DA\)](#)
- **Synonyms:** DMAEA, Dimethylaminoethyl acrylate
- **Chemical Formula:** C₇H₁₃NO₂
- **Product Use:** Frequently used in the production of polymers and as a chemical intermediate.
- **Manufacturer's Contact Information:**

Manufacturer name, address, emergency telephone numbers, and relevant details should be included here as per supplier specifications.

Section 2: Composition/Ingredients

- **Chemical Composition:**
 - - N,N-Dimethyl Aminoethyl Acrylate (CAS No.: 2439-35-2) – Purity typically > 98%
- **Impurities:** May include trace polymerization inhibitors (specifications depend on manufacturer).

Section 3: Hazards Identification

- **GHS Classification:**
 - - Flammable Liquid – Category 3
 - Skin Corrosion/Irritation – Category 2
 - Eye Damage/Irritation – Category 2A
 - Acute Toxicity (Oral) – Category 4
 - Specific Target Organ Toxicity (Single Exposure, Respiratory Tract Irritation) – Category 3
- **Signal Word:** WARNING

- **Hazard Statements:**

- - Flammable liquid and vapor.
 - Harmful if swallowed.
 - Causes skin irritation.
 - Causes serious eye irritation.
 - May cause respiratory irritation.

- **Precautionary Statements:**

- - Keep away from heat, sparks, open flames, and hot surfaces.
 - Avoid breathing vapor or mist.
 - Wash thoroughly after handling.
 - Wear protective gloves, clothing, and eye/face protection.

Section 4: First Aid Measures

- **Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.
- **Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If irritation develops, seek medical attention.
- **Inhalation:** Move the person to fresh air. If breathing is difficult, provide oxygen. Seek immediate medical assistance if symptoms persist.
- **Ingestion:** Rinse mouth thoroughly. Do not induce vomiting without advice from medical personnel. Call a physician or poison control center immediately.

Section 5: Handling and Storage

- **Handling:**

- - Use only in a well-ventilated area.
 - Avoid inhalation and direct contact with skin and eyes.
 - Keep away from ignition sources—no smoking during handling.

- **Storage:**

- - Store in a tightly closed container in a cool, dry, and well-ventilated place.

- Segregate from oxidizing agents and strong acids.
- Protect from sunlight and keep away from sources of heat or sparks.

Section 6: Exposure Controls/Personal Protection

- **Engineering Controls:**
 - - Install local exhaust ventilation to minimize vapor exposure.
- **Personal Protective Equipment (PPE):**
 - - **Eye Protection:** Wear safety glasses or chemical goggles.
 - **Skin Protection:** Use chemical-resistant gloves (e.g., nitrile or neoprene).
 - **Respiratory Protection:** Use an approved respirator if concentration exceeds exposure limits.
 - **Clothing:** Wear suitable protective clothing to minimize skin exposure.

Section 7: Physical and Chemical Properties

- **Appearance:** Clear, colorless to pale yellow liquid
- **Odor:** Strong, amine-like odor
- **pH:** Not applicable
- **Melting Point:** Not available
- **Boiling Point:** Approximately 190°C
- **Flash Point:** 65°C (closed cup)
- **Solubility:** Soluble in water and most organic solvents
- **Density:** Approx. 0.96 g/cm³
- **Vapor Pressure:** Low

Section 8: Stability and Reactivity

- **Stability:** Stable under recommended storage conditions. May polymerize if exposed to high temperatures or light.
- **Reactivity:** Reacts with strong oxidizing agents and acids.

- **Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides, and other toxic fumes upon combustion.
- **Conditions to Avoid:** High temperatures, exposure to sunlight, and contact with incompatible substances.

Section 9: Toxicological Information

- **Routes of Exposure:** Contact with skin, eyes, ingestion, inhalation.
- **Acute Toxicity:**
 - - Oral toxicity (LD50) – Harmful if swallowed.
 - Skin exposure – Can cause irritation or sensitization.
 - Eye exposure – Causes irritation and may result in redness or tearing.
- **Chronic Effects:** Prolonged or repeated exposure may cause dermatitis or respiratory irritation.
- **Sensitization:** Some individuals may develop allergic skin reactions.

Section 10: Disposal Considerations

- **Waste Disposal Methods:**
 - - Dispose of unused material and containers in compliance with local, regional, and national regulations.
 - Do not allow chemical to enter drains or waterways.
 - Consult a licensed disposal facility for safe handling.