Acryloyloxyethyltrimethyl Ammonium Chloride (DAC) MSDS

Section 1: Product Name and Identification

- **Product Name:** Acryloyloxyethyltrimethyl Ammonium Chloride (DAC)
- **Synonyms:** N/A
- **Chemical Formula:** C8H16ClNO2
- **Product Use:** Commonly used as a water-soluble monomer in the formulation of cationic polymers.
- **Manufacturer Contact Information:**

Address, emergency numbers, and details would be added here by the specific manufacturer.

Section 2: Composition/Ingredients

- **Chemical Composition:**
  -
  - Acryloyloxyethyltrimethyl Ammonium Chloride – 100%
- **CAS Number:** 44992-01-0
- **Impurities:** Not applicable unless specified by the manufacturer.

Section 3: Hazards Identification

- **GHS Classification:**
  -
  - Skin Corrosion/Irritation – Category 2
  - Eye Damage/Irritation – Category 2A
  - Environmental Hazard – Aquatic Acute Category 3
- **Signal Word:** WARNING
- **Hazard Statements:**
  -

    - May cause irritation to skin and eyes.
    - Harmful to aquatic life with short-lasting effects.

- **Precautionary Statements:**

    -
    - Avoid skin and eye contact.
    - Prevent release to the environment.

Section 4: First Aid Measures

- **Eye Contact:** Rinse cautiously with water for several 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. Consult a physician if irritation develops.

- **Inhalation:** Move the person to fresh air. If difficulty in breathing persists, seek medical attention.

- **Ingestion:** Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Seek immediate medical assistance.

Section 5: Handling and Storage

- **Handling:**

    -
    - Use appropriate personal protective equipment (PPE).
    - Avoid ingestion, inhalation, and contact with skin or eyes.
    - Work in a well-ventilated area.

- **Storage:**

    -
    - Store in a cool, dry, and well-ventilated area away from incompatible materials such as strong acids and oxidizing agents.
    - Keep container tightly closed.

Section 6: Exposure Controls/Personal Protection

- **Engineering Controls:**

    -

    - Ensure adequate ventilation, especially in confined spaces. Use local exhaust systems where applicable.

- **Personal Protective Equipment (PPE):**
    -
    - **Eye Protection:** Chemical safety goggles.
    - **Skin Protection:** Chemical-resistant gloves.
    - **Respiratory Protection:** Use a respirator if necessary, compliant with NIOSH or other applicable standards.
    - **Clothing:** Wear suitable protective clothing to prevent skin exposure.

Section 7: Physical and Chemical Properties

- **Appearance:** Clear liquid or viscous solution
- **Odor:** Slightly amine-like
- **pH:** Neutral to slightly acidic
- **Melting Point:** Not available
- **Boiling Point:** Decomposes before boiling
- **Flash Point:** Not applicable
- **Solubility in Water:** Soluble
- **Density:** Approximately 1.04 g/cm³
- **Vapor Pressure:** Low

Section 8: Stability and Reactivity

- **Stability:** Chemically stable under recommended storage conditions.
- **Reactivity:** Avoid reaction with strong oxidizers and reducing agents.
- **Hazardous Decomposition Products:** May produce carbon oxides, nitrogen oxides, and hydrogen chloride under conditions of decomposition.
- **Conditions to Avoid:** High temperatures, sunlight, and moisture exposure.

Section 9: Toxicological Information

- **Routes of Exposure:** Eyes, skin, inhalation, and ingestion.

- **Acute Toxicity:**

  -
  - Skin irritation – May cause mild to moderate irritation.
  - Eye irritation – May cause redness and discomfort.
  - Oral toxicity – Potentially harmful if swallowed.

- **Chronic Effects:** Prolonged or repeated exposure may result in organ damage if absorbed through the skin or ingested.

Section 10: Disposal Considerations

- **Waste Disposal Methods:**

  -
  - Dispose of contents and container in accordance with local, state, and federal regulations.
  - Avoid releasing material into the environment.
  - Consult a licensed waste disposal service for safe and compliant disposal methods.