

Triacetin MSDS

1. Product Name and Identification

Product Name: [Triacetin](#)

Synonyms: Glycerol Triacetate, Triacetin Glyceride, 1,2,3-Triacetoxyp propane

CAS Number: 102-76-1

Recommended Uses: Solvent, Plasticizer, Food additive, Pharmaceutical applications

Manufacturer/Distributor Details:

- **Name:** [Insert Manufacturer/Distributor Name]
 - **Address:** [Insert Address]
 - **Emergency Contact Number:** [Insert Contact Number]
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2. Composition/Ingredients

Substance/Preparation: Substance

Chemical Name: Triacetin

CAS Number: 102-76-1

Percent Composition: 100%

3. Hazards Identification

Classification of the Substance or Mixture:

- **Not classified as hazardous according to GHS or OSHA standards.**

Hazard Statements:

- May cause mild eye irritation with direct exposure.
- Prolonged skin contact may cause irritation in sensitive individuals.

Precautionary Statements:

- Avoid contact with eyes.
- Use in well-ventilated spaces to prevent inhalation of mist, if generated.
- Wash thoroughly after handling.

Pictograms:

- Not applicable for non-hazardous classification

Additional Notes: Triacetin is generally considered low-risk under normal handling and use.

4. First Aid Measures

General Information: No significant hazards exist under normal conditions. Treat symptoms as applicable.

Eyes: Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

Skin: Wash exposed skin with soap and water. Seek medical advice if redness or irritation develops.

Inhalation: If inhaled in mist form, move to fresh air. Seek medical attention if respiratory symptoms develop.

Ingestion: Rinse mouth with water. Do NOT induce vomiting. If symptoms occur, seek medical attention.

Important Notes for Physicians: Treat symptomatically. No specific antidote is required.

5. Handling and Storage

Handling:

- Avoid excessive inhalation of mist (if generated).
- Wash hands and exposed areas after handling.
- Prevent eye and prolonged skin contact.

Storage:

- Store in tightly closed containers in a cool, dry, and well-ventilated area.
 - Protect from direct sunlight and excessive heat.
 - Keep away from incompatible substances such as strong oxidizers.
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6. Exposure Controls/Personal Protection

Engineering Controls:

- Ensure good ventilation in the workspace.

Personal Protection Equipment (PPE):

- **Eye Protection:** Safety goggles in case of splashes or mists.
- **Skin Protection:** Chemical-resistant gloves for handling larger volumes.
- **Respiratory Protection:** Not required under normal conditions. Use a respirator when handling mists in poorly ventilated areas.
- **Other:** Wear appropriate protective clothing if necessary to prevent prolonged exposure.

Hygiene Measures:

- Wash hands thoroughly after handling and before any food or drink consumption.

Recommended Exposure Limits:

- No established exposure limits. Use general good industrial hygiene practices.
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7. Physical and Chemical Properties

- **Appearance:** Clear, colorless, viscous liquid
 - **Odor:** Odorless or slightly fatty odor
 - **Melting Point:** -78°C
 - **Boiling Point:** Approx. 258°C
 - **Flash Point:** 150°C (closed cup)
 - **Auto-Ignition Temperature:** Approx. 410°C
 - **Flammability:** Non-flammable under normal conditions
 - **Vapor Pressure:** < 0.01 mmHg at 20°C
 - **Density:** Approx. 1.16 g/cm³ at 20°C
 - **pH:** Neutral to slightly acidic (not applicable as a liquid)
 - **Solubility:** Soluble in water (approx. 7% at 20°C) and most organic solvents
 - **Molecular Formula:** C₉H₁₄O₆
 - **Molecular Weight:** 218.21 g/mol
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8. Stability and Reactivity

Chemical Stability: Stable under normal handling and recommended storage conditions.

Conditions to Avoid: Excessive heat and prolonged exposure to sunlight.

Materials to Avoid: Strong oxidizing agents, strong acids, or strong bases.

Hazardous Decomposition Products: May release carbon monoxide (CO) and carbon dioxide (CO₂) upon combustion.

Polymerization: Will not occur under standard conditions.

9. Toxicological Information

Acute Toxicity:

- Oral LD50 (Rat): Approx. 3,500 mg/kg (low toxicity)

Skin Corrosion/Irritation: Not classified as a skin irritant, may cause dryness with repeated exposure.

Eye Damage/Irritation: May cause mild irritation following direct exposure.

Respiratory Effects: Mist inhalation may cause minor irritation to the respiratory tract.

Chronic Effects: No specific chronic effects known under low-level exposure.

Carcinogenicity: Not classified as carcinogenic by IARC, NTP, or OSHA.

Other Information: Triacetin is considered generally low risk in normal, directed use conditions.

10. Disposal Considerations

Waste Disposal Methods:

- Dispose of this product in accordance with local, regional, and national regulations. Do not release large amounts into drains or waterways.

Packaging Disposal:

- Thoroughly clean containers prior to recycling or disposal. Ensure complete drainage of residues.

Environmental Precautions: Triacetin is not regarded as an environmental hazard, but avoid unnecessary release into water systems.
