MATERIAL SAFETY DATA SHEET  
(MSDS)  
TEREPHTHALOYL CHLORIDE

1. Product Identification

MSDS Name: Terephthaloyl Chloride 99+%  
Synonym: TCI; 1,4-Benzenedicarbonyl chloride, p-Phthaloyl chloride.

Urgent contact: Shanghai Sunivo Supply Chain Management Co., Ltd.  
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2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>content</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-20-9</td>
<td>Terephthaloyl chloride</td>
<td>&gt;99</td>
<td>202-829-5</td>
</tr>
</tbody>
</table>

Hazard Symbols: C  
Risk Phrases: 34

3. Hazards Identification

EMERGENCY OVERVIEW  
Causes burns. Moisture sensitive. Corrosive. Lachrymator (substance which increases the flow of tears).

Potential Health Effects  
Eye:  
Causes eye burns.  
Skin:  
Causes skin burns.  
Ingestion:  
May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns.  
Inhalation:

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May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.

**Chronic:**
None

### 4. First Aid Measures

**Eyes:**
Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

**Skin:**
Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

**Ingestion:**
Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:**
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

**Notes to Physician:**

### 5. Fire Fighting Measures

**General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:**
Do NOT use water directly on fire. Use foam, dry chemical, or carbon dioxide. Do NOT get water inside containers.
6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers.

7. Handling and Storage

Handling:
Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Do not allow contact with water. Discard contaminated shoes. Keep from contact with moist air and steam.

Storage:
Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Store protected from moisture.

8. Exposure Controls/Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 100-20-9: Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to minimize contact with skin.

Respirators:
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

9. Physical and Chemical Properties

Physical State: Needles
Color: colorless or almost colorless
Odor: None reported.
pH: Not available.
Vapor Pressure: 0.03 hPa @ 25 C
Viscosity: Not available.
Boiling Point: 266 deg C @ 760 mm Hg
Freezing/Melting Point: 79 - 81 deg C
Autoignition Temperature: > 450 deg C (> 842.00 deg F)
Flash Point: 180 deg C ( 356.00 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: >300 deg C
Solubility in water: Decomposes.
Specific Gravity/Density:
Molecular Formula: C8H4Cl2O2
Molecular Weight: 203.02

10. Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Dust generation, moisture, excess heat.

Incompatibilities with Other Materials:
Oxidizing agents.

Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

11. Toxicological Information

RTECS#:
CAS# 100-20-9: WZ1797000 LD50/LC50:
CAS# 100-20-9: Inhalation, rat: LC50 = 700 mg/m3/4H; Oral, mouse: LD50 = 2140 mg/kg; Oral, rabbit: LD50 = 950 mg/kg; Oral, rat: LD50 = 2500 mg/kg.

Carcinogenicity:
Terephthaloyl chloride - Not listed by ACGIH, IARC, or NTP.

Other:
See actual entry in RTECS for complete information.

12. Ecological Information

Other: Do not empty into drains.

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13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

14. Transport Information

IATA

Shipping Name: CORROSIVE SOLID, N.O.S.*

Hazard Class: 8

UN Number: 1759

Packing Group: II

IMO

Shipping Name: CORROSIVE SOLID, N.O.S.

Hazard Class: 8

UN Number: 1759

Packing Group: II

RID/ADR

Shipping Name: CORROSIVE SOLID, N.O.S.

Hazard Class: 8

UN Number: 1759

Packing group: II

15. Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:
R 34 Causes burns.

Safety Phrases:
S 7/8 Keep container tightly closed and dry.
S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection)
CAS# 100-20-9: 1
Canada
CAS# 100-20-9 is listed on Canada's DSL List.
CAS# 100-20-9 is not listed on Canada's Ingredient Disclosure List.
US FEDERAL
TSCA
CAS# 100-20-9 is listed on the TSCA inventory.

16. Other Information

Disclaimer:
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SUNIVO provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.
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