



Section 1. Product and Company Identification

**Product Name** Terephthalic acid  
**CAS Number** 100-21-0

**Parchem - fine & specialty chemicals**  
**415 Huguenot Street**  
**New Rochelle, NY 10801**  
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EMERGENCY RESPONSE NUMBER  
CHEMTEL  
Toll Free US & Canada: 1 (800) 255-3924  
All other Origins: 1 (813) 248-0585  
Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**

Not a hazardous substance or mixture.

**Hazard and precautionary statements**

Not a hazardous substance or mixture.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** None

Section 3. Composition / Information on Ingredients

**Common Name** Terephthalic acid  
**Synonym(s)** Benzene-1,4-dicarboxylic acid  
**Formula**  $C_8H_6O_4$   
**CAS Number** 100-21-0

COMPONENT	CAS NUMBER	CONCENTRATION
Terephthalic acid	100-21-0	90 - 100%

Section 4. First Aid Measures

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off with soap and plenty of water.

**In case of eye contact:** Flush eyes with water as a precaution.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

**Indication of any immediate medical attention and special treatment needed:** No data available

Section 5. Firefighting Measures

**Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

**Special hazards arising from the substance or mixture:** No data available

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information:** No data available

Section 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Avoid dust formation. Avoid breathing vapors, mist or gas.

**Environmental precautions:** No special environmental precautions required.

**Methods and materials for containment and cleaning up:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

**Precautions for safe handling:** Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

Section 8. Exposure Controls / Personal Protection

**Components with workplace control parameters**

Component	Cas-No.	Value	Control Parameters	Basis
Terephthalic acid	100-21-0	TWA	10.000000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		TWA	10 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		PEL	10 mg/m <sup>3</sup>	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

**Exposure controls**

**Appropriate engineering controls:** General industrial hygiene practice.

**Personal protective equipment**

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate

government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact**

**Material:** Nitrile rubber

**Minimum layer thickness:** 0.11 mm

**Break through time:** 480 min

**Splash contact**

**Material:** Nitrile rubber

**Minimum layer thickness:** 0.11 mm

**Break through time:** 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** No special environmental precautions required.

Section 9. Physical and Chemical Properties

**Form:** powder

**Color:** white

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** Melting point/range: > 300 °C (> 572 °F)

**Initial boiling point and boiling range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** < 0.01 hPa (< 0.01 mmHg) at 20°C (68°F)

**Vapor density:** No data available

**Relative density:** 1.58 g/cm<sup>3</sup> at 25°C (77°F)  
**Water solubility:** ca.0.017 g/l at 25°C (77°F) - slightly soluble  
**Partition coefficient n-octanol/water:** No data available  
**Auto-ignition temperature:** No data available  
**Decomposition temperature:** No data available  
**Viscosity:** No data available  
**Explosive properties:** No data available  
**Oxidizing properties:** No data available  
**Other safety information:** No data available

#### Section 10. Stability and Reactivity

**Reactivity:** No data available  
**Chemical stability:** Stable under recommended storage conditions.  
**Possibility of hazardous reactions:** No data available  
**Conditions to avoid:** No data available  
**Incompatible materials:** Strong oxidizing agents  
**Hazardous decomposition products formed under fire conditions:** Carbon oxides  
**Other decomposition products:** No data available

#### Section 11. Toxicological Information

##### Acute toxicity

**LD50:** Oral - Rat - male and female - > 15,380 mg/kg (OECD Test Guideline 401)  
**LC50:** Inhalation - Rat - male and female - 2 h - > 2.02 mg/l (OECD Test Guideline 403)  
**LD50:** Dermal - Rabbit - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

##### Skin corrosion/irritation

**Skin:** Rabbit  
**Result:** No skin irritation - 24 h (OECD Test Guideline 404)

##### Serious eye damage/eye irritation

**Eyes:** Rabbit  
**Result:** No eye irritation (OECD Test Guideline 405)

**Respiratory or skin sensitization:** No data available

##### Germ cell mutagenicity

**Ames test:** S. typhimurium  
**Result:** negative

##### Mutagenicity (micronucleus test)

**Mouse:** male and female  
**Result:** negative



### Carcinogenicity

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

### Additional Information

**RTECS:** WZ0875000

## Section 12. Ecological Information

### Toxicity

**Toxicity to fish:** semi-static test LC50 - *Oryzias latipes* - > 18.6 mg/l - 96 h (OECD Test Guideline 203)

**Toxicity to daphnia and other aquatic invertebrates:** Immobilization EC50 - *Daphnia magna* (Water flea) - > 20.1 mg/l - 48 h (OECD Test Guideline 202)

**Toxicity to algae:** Growth inhibition EC50 - *Pseudokirchneriella subcapitata* (green algae) - > 19 mg/l - 72 h (OECD Test Guideline 201)

**Toxicity to bacteria:** Respiration inhibition EC50 - Sludge Treatment - 1,393 mg/l - 3 h (OECD Test Guideline 209)

### Persistence and degradability

**Biodegradability:** aerobic - Exposure time 14 d

**Result:** 85.2 % - Readily biodegradable. (OECD Test Guideline 301B)

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects:** No data available

## Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.



Section 14. Transport Information

**DOT (US):** Not dangerous goods  
**IMDG:** Not dangerous goods  
**IATA:** Not dangerous goods

Section 15. Regulatory Information

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** No SARA Hazards

**Massachusetts Right To Know Components:** Terephthalic acid CAS-No. 100-21-0 Revision Date 1993-04-24

**Pennsylvania Right To Know Components:** Terephthalic acid CAS-No. 100-21-0 Revision Date 1993-04-24

**New Jersey Right To Know Components:** Terephthalic acid CAS-No. 100-21-0 Revision Date 1993-04-24

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**HMIS Rating**

**Health hazard:** 0

**Flammability:** 0

**Physical Hazard:** 0

**NFPA Rating**

**Health hazard:** 0

**Fire Hazard:** 0

**Reactivity Hazard:** 0

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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