



Product Safety Summary Sheet

DuPont™ Terephthaloyl Dichloride

Chemical Identification, Product Identification or Common Name:

CAS number (EC inventory): 100-20-9
CAS Index name: 1,4-Benzenedicarbonyl dichloride
EC Number: 202-829-5
IUPAC name: terephthaloyl dichloride

Product Uses and Applications:

Terephthaloyl Dichloride (TCL) is used as a key component in performance polymers and aramid fibers, where it imparts flame resistance, chemical resistance, temperature stability, light weight, and very high strength. TCL is also an effective water scavenger, used to stabilize isocyanates and urethane prepolymers.

Physical Properties of the Chemical or Product:

Terephthaloyl Dichloride is a clear, water-white liquid above its freezing point and a white crystalline solid at room temperature. TCL has a boiling point of 265 °C and a melting point of 81.5 - 83 °C. Terephthaloyl Dichloride is not flammable, not explosive, and non-oxidizing.

Exposure Potential:

Workplace exposure: This substance is classified for acute inhalation. Operations should be designed to prevent exposures.

Workers should follow the recommended safety measures contained within the Safety Data Sheet (SDS) and on any product packaging. Employees should be trained in the appropriate work processes and safety equipment to limit unnecessary exposure to chemical substances. Occupational use of this substance is considered to be safe provided the recommended safety

measures in the SDS are followed.

Consumer exposure: There is no known consumer use or exposure to the substance. The substance is no longer present once reacted or polymerized.

Environmental exposure: Based on closed systems operations, no emissions would be expected. The substance itself is of no immediate concern for the environment (aquatic and terrestrial compartment). However, contact with moisture or water will create Hydrochloric Acid within the environment.

Health Information:

Note: The information contained in this section may be useful to someone handling the pure undiluted substance such as a manufacturer or transporter. Consumers are not likely to come in contact with the pure substance. For more information on health hazards and recommended protective equipment, please refer to the SDS.

Exposures may affect human health as follows:

Effect Assessment	Result
Acute Toxicity	Oral: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Dermal: Moderately toxic via exposure to skin. Inhalation: Moderately toxic by inhalation.
Irritation	Skin: Causes severe skin burns. May cause corrosion with pain, ulceration or blisters, cracking or peeling of skin; damage may be permanent. Extremely corrosive and destructive to tissue. Eye: Corrosive; may cause permanent eye injury if not promptly treated. May cause tearing, pain, redness, swelling, ulceration, visual impairment or blindness. Respiratory tract: may cause irritation of the respiratory system.
Sensitization	Not a skin sensitizer.
Mutagenicity	Based on available data, did not cause genetic damage in animals nor cultured bacterial cells.
Carcinogenicity	Based on available data, not considered carcinogenic.
Toxicity after repeated exposure	After repeated ingestion, may cause bloody urine or bladder effects.
Toxicity to Reproduction/Development	Based on available data, not classified.

Environmental Information:

Note: The information contained in this section is intended to provide brief and general information of this substance's environmental impact. The results in the table below refer to testing performed with the non-formulated, undiluted substance. The data does not replace the data given in the SDS. For more information and recommended protective measures please refer to the SDS.

Effect Assessment	Result
Aquatic Toxicity	Very slightly toxic to the aquatic environment.
Persistence and degradability	Readily biodegradable. Not persistent.
Bioaccumulation potential	No bioaccumulation.

Risk Management:**Workplace Management:**

Operations should be designed to prevent exposures because of the toxicity of the substance. Exposure of the substance to moisture or water will cause the formation of strong acids.

Consumer Risk Management:

Because of the closed nature of the uses of Terephthaloyl Dichloride, there are no expected exposures for consumers.

Regulatory Information:

Always refer to the Safety Data Sheet (SDS) for guidance on regulatory restrictions that may govern the manufacture, sale, transportation, use and/or disposal of this chemical or product. Regulations may vary by region, country, state, county, city, or local government. Consult with environmental regulatory agencies for guidance on acceptable disposal practices.

First Aid Information:

For all First Aid or Emergency information, consult the Safety Data Sheet (SDS).

Information Sources:

Data is compiled from a variety of sources, including publicly available documents, internal data and other sources such as, but not limited to, Chemical Safety Reports and Safety Data Sheets (SDS).

Contact Information:

E.I. du Pont de Nemours and Company, Wilmington, DE 19805

USA Customer Service:

Toll Free: 1-800-441-7515

Global: 1-302-774-1000

Hours: 8:00am-7pm EST

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