

## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date: 20.12.2007

Revision: 20.12.2007

### 1 Identification of substance:

- **Product details:**
- **Trade name: terephthalic acid**
- **Application of the substance / the preparation**  
 Manufacturing of polyester for foils  
 Manufacturing of polyethylene terephthalate (PET)
- **Supplier/Manufacturer:**  
 Penpet Petrochemical Trading GmbH  
 Merkur-Park  
 Sieker Landstrasse 126  
 22143 Hamburg  
 Germany  
 Tel: +49 40 675 799 0  
 Fax: +49 40 675 799 99 / 88
- **Email competent person:** angelika.torges@kft.de
- **Information department:** See supplier/manufacturer
- **Emergency information:** National Poisons Information Centre      Tel.: +44 (0)870 6006266

### 2 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for man and environment:**  
 According to current European laws and regulations the product is not dangerous or toxic material (based on the available data).
- **Additional information:** Risk of dust explosion

### 3 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description:**  
 100-21-0 terephthalic acid
- **Identification number(s):**
- **EINECS Number:** 202-830-0

### 4 First aid measures

- **General information:** If symptoms persist or in case of doubt seek medical advice.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
 Wash with water and soap.  
 If available apply polyethylenglycol (PEG 400, Lutrol) and let it remain on the skin for several minutes.  
 Do not use solvents or thinners.
- **After eye contact:**  
 Rinse opened eye for several minutes under running water.  
 If symptoms persist consult a doctor.
- **After swallowing:**  
 Rinse out mouth and then drink plenty of water.  
 Administer medicinal carbon  
 Seek medical treatment.
- **Information for doctor:**
- **The following symptoms may occur:**  
 After swallowing:  
 Nausea  
 Vomiting  
 Diarrhoea

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**· Treatment:**

Symptomatic treatment

In cases of irritation to the lungs, initial treatment with Dexametason metered aerosol.

### 5 Fire fighting measures

**· Suitable extinguishing agents:**

Foam

Fire-extinguishing powder

Use fire fighting measures that suit the environment.

**· Special hazards caused by the material, its products of combustion or resulting gases:**

Dangerous decomposition product see chapter 10: stability and reactivity

**· Protective equipment:** Wear self-contained respiratory protective device.

**· Additional information:**

Move containers from area if it can be done without risk or cool them with water.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 6 Accidental release measures

**· Person-related safety precautions:** Wear protective clothing.

**· Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

**· Measures for cleaning/collecting:**

Avoid dust formation absolutely. If necessary pick up with a tested and approved industrial vacuum cleaner.

Send for recovery or disposal in suitable receptacles.

### 7 Handling and storage

**· Handling**
**· Information for safe handling:**

Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

**· Information about protection against explosions and fires:**

Dust can combine with air to form an explosive mixture.



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges

**· Storage**
**· Requirements to be met by storerooms and receptacles:** Store at ambient temperatures and at dry conditions.

**· Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from feed.

**· Further information about storage conditions:** None.

**· Storage class** 11 Combustible solids

### 8 Exposure controls and personal protection

**· Additional information about design of technical systems:** No further data; see item 7.

**· Components with limit values that require monitoring at the workplace:** Not required.

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- **Additional Occupational Exposure Limit Values for possible hazards during processing:**

- Observe general threshold limit for dust.

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures:**

The usual precautionary measures should be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Use skin protection cream for skin protection.

- **Breathing equipment:**

In case of unintended release:



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

Filter P2.

- **Protection of hands:**

At longer contact: protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Preventive skin protection by use of skin-protecting agents is recommended.

- **Material of gloves:**

For undissolved solid substances following materials may be suitable:

Nitrile rubber, NBR

Butyl rubber, BR

Polychloroprene rubber (CR)

Fluorocarbon rubber (FKM)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Adjust selection of glove material to the other substances used.

- **Penetration time of glove material:**

The exact break-through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Not required.

- **Body protection:** Protective work clothing.

## 9 Physical and chemical properties:

- **General Information**

**Form:** Crystalline powder

**Colour:** White

**Odour:** Nearly odourless

- **Change in condition:**

**Melting point/Melting range:** 402°C  
sublimed

**Boiling point/Boiling range:** undetermined

- **Flash point:** 260°C (open cup)

- **Flammability (solid, gaseous)** Product is not flammable.

- **Ignition temperature:** 496°C

- **Decomposition temperature:** > 300°C

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- **Danger of explosion:** Product is not explosive. However, formation of explosive air/dust mixtures is possible.
- **Vapour pressure at 120°C:** 0.5 hPa
- **Density at 20°C:** 1.51 g/cm<sup>3</sup>
- **Solubility in / Miscibility with Water:** Insoluble

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Materials to be avoided:** Strong oxidants
- **Dangerous reactions:**  
Strong exothermic reaction with above-mentioned substances.  
As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion
- **Dangerous products of decomposition:**  
In the case of fire or at high temperatures the formation of the following decomposition products is possible.  
Irritant gases/vapours

### 11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**  
LD<sub>50</sub> (ipr) 1430 mg/kg (mouse)
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** Light irritation possible
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.  
The substance is not subject to classification according to the latest version of the EU lists.

### 12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Presently there are no ecotoxicological values available.
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations

- **Product:**
- **Recommendation:**  
Smaller quantities can be disposed of with household waste.  
Disposal according to instructions of local authorities.
- **European waste catalogue:**  
07 01 99 wastes not otherwise specified
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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### 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** No hazardous good according to the regulation.
- **Maritime transport IMDG:**
- **IMDG Class:** No hazardous good according to the regulation.
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** No hazardous good according to the regulation.

### 15 Regulations

- **Markings according to EC guidelines:**  
The substance(product)is not subject to classification according to EC-directives and other sources of literature known to us.  
Observe the general safety regulations when handling chemicals
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:**  
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