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# **Material Safety Data Sheet**

Version 4.0 Revision Date 03/13/2010 Print Date 12/24/2010

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Terephthaloyl chloride

Product Number : 120871 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

#### **OSHA Hazards**

Toxic by inhalation., Corrosive

## Other hazards which do not result in classification

Lachrymator.

### GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H303 May be harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

**HMIS Classification** 

Health hazard: 3 Flammability: 1 Physical hazards: 0

**NFPA Rating** 

Health hazard: 3 Fire: 1 Reactivity Hazard: 0

**Potential Health Effects** 

**Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous

membranes and upper respiratory tract.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

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**Eyes** Causes eye burns.

**Ingestion** May be harmful if swallowed. Causes burns.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula :  $C_8H_4Cl_2O_2$ Molecular Weight : 203.02 g/mol

CAS-No.	EC-No.	Index-No.	Concentration		
Terephthaloyl dichloride					
100-20-9	202-829-5	-	-		

#### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### **6. ACCIDENTAL RELEASE MEASURES**

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

#### **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

## Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Hand protection**

Handle with gloves.

## Eye protection

Face shield and safety glasses

## Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form flakes
Colour white

## Safety data

pH no data available

Melting point 79 - 81 °C (174 - 178 °F) - lit.

Boiling point 266 °C (511 °F) - lit.

Flash point 180 °C (356 °F) - closed cup

Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available

Vapour pressure 0.08 hPa (0.06 mmHg) at 38 °C (100 °F)

0.03 hPa (0.02 mmHg) at 25 °C (77 °F)

Water solubility no data available

### 10. STABILITY AND REACTIVITY

## **Chemical stability**

Stable under recommended storage conditions.

#### Conditions to avoid

Avoid moisture.

#### Materials to avoid

Alcohols, Oxidizing agents, Strong bases

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

#### 11. TOXICOLOGICAL INFORMATION

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### **Acute toxicity**

LD50 Oral - rat - 2,500 mg/kg

LC50 Inhalation - rat - 4 h - 700 mg/m3

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation. Lungs, Thorax, or Respiration: Dyspnea. Lungs, Thorax, or Respiration: Respiratory stimulation.

#### Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation

no data available

## Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

no data available

## 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

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

Reproductive toxicity - rat - Oral

Maternal Effects: Menstrual cycle changes or disorders.

Reproductive toxicity - rat - Oral

Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).

### Specific target organ toxicity - single exposure (GHS)

no data available

## Specific target organ toxicity - repeated exposure (GHS)

no data available

### **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes

and upper respiratory tract.

**Ingestion** May be harmful if swallowed. Causes burns.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

## Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

# **Additional Information**

RTECS: WZ1797000

### 12. ECOLOGICAL INFORMATION

### **Toxicity**

no data available

### Persistence and degradability

no data available

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## Bioaccumulative potential

no data available

## Mobility in soil

no data available

## PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

### 13. DISPOSAL CONSIDERATIONS

#### Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 2923 Class: 8 (6.1) Packing group: III

Proper shipping name: Corrosive solids, toxic, n.o.s. (Terephthaloyl dichloride)

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 2923 Class: 8 (6.1) Packing group: III EMS-No: F-A, S-B Proper shipping name: CORROSIVE SOLID, TOXIC, N.O.S. (Terephthaloyl dichloride)

Marine pollutant: No

**IATA** 

UN-Number: 2923 Class: 8 (6.1) Packing group: III

Proper shipping name: Corrosive solid, toxic, n.o.s. (Terephthaloyl dichloride)

### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Toxic by inhalation., Corrosive

#### **DSL Status**

All components of this product are on the Canadian DSL list.

## **SARA 302 Components**

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

## **SARA 313 Components**

SARA 313: 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

Acute Health Hazard

## **Massachusetts Right To Know Components**

	CAS-No.	Revision Date
Terephthaloyl dichloride	100-20-9	1993-04-24

## Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Terephthaloyl dichloride	100-20-9	1993-04-24

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## **New Jersey Right To Know Components**

Terephthaloyl dichloride

CAS-No. 100-20-9

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.

## **16. OTHER INFORMATION**

#### **Further information**

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