

**Material Safety Data Sheet****P –TOLUOYL CHLORIDE****Section 1 - Product and Company Information**

Substance : P-Toluoyl Chloride  
Trade Name : P-Toluoyl chloride, 4-Methyl Benzoyl Chloride  
Chemical Family : Acid Chloride  
Company : Shiva Pharmachem Ltd.  
Plot No. 588,  
Village Luna – 391440  
Taluka Padra,  
District: Vadodara, Gujarat,  
India.  
Phone No. : +91-2662-221021 / 224360  
Fax No. : +91-2662-223314

**Section 2 - Composition / Information on Ingredients**

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight.
P-Toluoyl Chloride	874-60-2	212-864-8	C <sub>8</sub> H <sub>7</sub> ClO	154.59 g/mol

**Section 3 – Hazards Identification****SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIROMENT**

Causes burns.

**Section 4 – First Aid Measures****INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.

**EYE Contact**

Assure adequate flushing of the eyes by separating the eyelids with fingers

**INGESTION**

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

**Section 5 – Fire Fighting Measures****CONDITIONS OF FLAMMABILITY**

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

**EXTINGUISHING MEDIA**

Suitable: Carbon Dioxide. Dry Chemical Powder.

Unsuitable: Do not use water

## **Material Safety Data Sheet**

### **Special Risks**

Specific Hazard(s): Emits toxic fumes under fire conditions

Explosion Hazards: Container explosion may occur under fire conditions.

### **SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### **Specific method(s) of Fire fighting**

Use water spray to cool fire exposed containers.

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## **Section 6 – Accidental Release Measures**

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### **PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

Evacuate area.

### **PROCEDURE(S) OF PERSONAL PRECAUTION(S)**

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

### **METHODS FOR CLEANING UP**

Cover with dry-lime, sand or soda ash. Place in covered containers using non-sparking tools and transport outdoors.

Ventilate area and wash spill site after material pickup is complete

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## **Section 7 - Handling and Storage**

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### **HANDLING**

**Directions for Safe Handling:** Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### **STORAGE**

**Conditions of Storage:** Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

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## **Section 8 - Exposure Controls / Personal Protection**

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### **ENGINEERING CONTROLS**

Use only in a chemical fume hood. Use safety shower and eye bath.

### **GENERAL HYGIENE MEASURES**

Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

### **PERSONAL PROTECTIVE EQUIPMENT**

Special protective Measures: Wear appropriate government approved respirator, chemical – resistant glove, safety goggles, other protective clothing.

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## **Section 9 - Physical and Chemical Properties**

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Appearance Color

: Colorless

Form

: Clear Liquid

### Material Safety Data Sheet

Property	: Value	at Temperature or Pressure
PH	: N/A	
BP/BP Range	: 225-227° C @ 10 mmHg	
MP/MP Range	: -4.0 ° C	
Flash Point	: 82° C Method: Closed Up	
Flammability	: N/A	
Autoignition Temp	: N/A	
Oxidizing Properties	: N/A	
Explosive Properties	: N/A	
Explosive Limits Lower	: 1.6 %	
Vapor Pressure	: 0.55 mmHg @ 20° C	
SG/Density	: 1.169 g/cm <sup>3</sup>	
Partition Coefficient	: N/A	
Viscosity	: N/A	
Vapor Density	: 5.33 g/l	
Saturated Vapor Conc	: N/A	
Evaporation Rate	: N/A	
Bulk Density	: N/A	
Decomposition Temp.	: N/A	
Solvent Content	: N/A	
Water Content	: N/A	
Surface Tension	: N/A	
Conductivity	: N/A	
Miscellaneous Data	: N/A	
Solubility	: N/A	

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### **Section 10 - Stability and Reactivity**

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#### **STABILITY:**

Stable: Stable

Conditions to avoid: Moisture

Materials to Avoid: Water, Alcohols, Oxidizing agents, Strong bases, Metals.

#### **HAZARDOUS DECOMPOSITION PRODUCTS**

Hazardous Decomposition Products: Carbon monoxide, Hydrogen chloride gas, Phosgene Gas

#### **HAZARDOUS POLYMERIZATION**

Hazardous polymerization: will not occur

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### **Section 11 - Toxicological Information**

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#### **ACUTE TOXICITY**

LD50

Intravenous

Mouse

56 mg/kg

#### **SIGNS AND SYMPTOMS OF EXPOSURE**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Inhalation may result in spasm, inflammation and edema of the larynx and

bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath headache, nausea and

### **Material Safety Data Sheet**

vomiting. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

#### **ROUTE OF EXPOSURE**

Multiple Routes: Causes burns. Harmful if swallowed, inhaled or absorbed through skin.

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### **Section 12 - Ecological Information**

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No Data Available.

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### **Section 13 - Disposal Considerations**

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#### **SUBSTANCE DISPOSAL**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal state and local environmental regulations.

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### **Section 14 - Transport Information**

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#### **RID/ADR**

UN No. : 3265  
Hazard Class : 8  
PG : II  
Proper Shipping Name : Corrosive liquid, acidic organic n.o.s P -Toluoyl Chloride

#### **IMDG**

UN No. : 3265  
Hazard Class : 8  
PG : II  
Proper Shipping Name : Corrosive Liquid, Acidic Organics n.o.s P - Toluoyl Chloride  
Technical Name : Required, P-Toluoyl Chloride

#### **IATA**

UN No. : 3265  
Hazard Class : 8  
PG : II  
Proper Shipping Name : Corrosive Liquid, Acidic Organics n.o.s P - Toluoyl Chloride  
Inhalation Packing Group I : No  
Technical Name : Required, P-Toluoyl Chloride

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### **Section 15 - Regulatory Information**

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#### **CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES**

**INDICATION OF DANGER:** C Corrosive

#### **R-PHRASES: 34**

Causes burns.

**S-PHRASES:** 26-36/37/39-45

### **Material Safety Data Sheet**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

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#### **Section 16 - Additional Information**

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The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Shiva Pharmachem Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incident, consequential or exemplary damages, howsoever arising, even if Shiva Pharmachem Ltd has been advised of the possibility of such damages