

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Diphenylphosphine oxide  
**Synonyms:**  
**Company Identification:** PI Chemicals Ltd.  
5rd Floor, 88 Cailun Road  
Zhangjiang Hi-Tech Park  
Pudong New Area, Shanghai China, 201203  
**Telephone Number:** 86-21-58953700  
**Fax Number:** 86-21-58953701

### Section 2 - Product Information

**Catalog Number:** PI-35035  
**CAS Number:** 4559-70-0  
**MDL Number:** MFCD00002079  
**EC Number:** Not available  
**Purity:** 97%

### Section 3 - Physical and Chemical Properties

**Physical state:** Solid  
**Color:** Not available  
**Odor:** Not available  
**Molecular Formula:**  $C_{12}H_{11}OP$   
**Molecular Weight:** 202.19  
**Freezing/Melting Point:** 56-57 °C(lit.)  
**Boiling Point:** Not available  
**Flash Point:** Not available  
**Autoignition Temperature:** Not available  
**Refractive Index (nD20):** Not available  
**Density:** Not available  
**Decomposition Temperature:** Not available  
**Solubility:** Not available

### Section 4 - Hazards Identification

**Eye:** Causes eye irritation.

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<b>Skin:</b>	Causes skin irritation. Harmful if absorbed through the skin.
<b>Ingestion:</b>	May cause irritation of the digestive tract. Toxic if swallowed.
<b>Inhalation:</b>	May be harmful if inhaled. Causes respiratory tract irritation.

### ***Section 5 - First Aid Measures***

<b>Eye:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<b>Skin:</b>	Get medical aid. Flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.
<b>Ingestion:</b>	Get medical aid immediately. Wash mouth out with water.
<b>Inhalation:</b>	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

### ***Section 6 - Stability and Reactivity***

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures.
<b>Materials to avoid:</b>	Strong oxidizing agents.
<b>Conditions to Avoid:</b>	Incompatible materials.
<b>Hazardous Decomposition Products:</b>	Carbon oxides, Phosphorous oxides.
<b>Hazardous Polymerization:</b>	Has not been reported.

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

<b>Handling:</b>	Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required.
<b>Storage:</b>	Store in a cool, dry place. Store in a tightly closed container.

### ***Section 8 - Personal Protection***

<b>Eyes:</b>	Wear appropriate protective eyeglasses.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	Use an approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### ***Section 9 - Fire and Explosion Hazard Data***

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and protective clothing to prevent contact with skin and eyes.
<b>Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or appropriate foam.

## **Section 10 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

## **Section 11 - Toxicological Information**

**RTECS#:** CAS#4559-70-0: Not available

**LD50/LC50:** RTECS: Not available.

**Carcinogenicity:** Diphenylphosphine oxide- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

## **Section 12 - Environmental information**

Not available

## **Section 13 - Disposal Consideration**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

## **Section 14 - Transport Information**

**IATA:** This substance is considered to be non-hazardous for transport.

**IMO:** This substance is considered to be non-hazardous for transport.

**RID/ADR:** This substance is considered to be non-hazardous for transport.

## **Section 15 - Regulatory Information**

### **European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: Xn

Indication of Danger: Harmful

Risk Phrases:

R 22: Harmful if swallowed.

R 36/37/38: Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS# 4559-70-0: 2

Canada

CAS# 4559-70-0: Not available

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**US Federal****TSCA**

CAS# 4559-70-0 is not listed on the TSCA Inventory. It is for research and development use only.

**Section 16 - Additional Information**

**MSDS Creation Date:** March 15, 2008

**Update:** March 20, 2008

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