

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: greenindustry@163.com

Web: www.taiangreenindustry.com

## Safety Data Sheet

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

### Section 1 - Chemical Product and Company Identification

#### 1.1 Product identifier:

Product name: Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

CAS No. : 75980-60-8

#### 1.2 Uses of the chemical product:

Intended use: Laboratory chemicals, Manufacture of substances.

#### 1.3 Supplier identifier:

Company name: Taian Green Industry Co., Ltd

Address: Room921, Building2, Dream Valley E-commerce Industrial Park,  
Lingshan Street, Taishan District, Taian City, Shandong Province,  
China

Postcode: 271000

E-mail: greenindustry@163.com

Telephone: +86 156 6659 0861

#### 1.4 Emergency telephone:

Emergency Phone #: +86 156 6659 0861

### Section 2 - Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Skin sensitisation (Category 1), H317

Reproductive toxicity (Category 2), H361

Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008



Pictogram:

Signal word: Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

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

Supplemental Hazard Statements None

#### 2.3 Other hazards

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: greenindustry@163.com

Web: www.taiangreenindustry.com

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## Section 3 - Composition/information on ingredients

### 3.1 Substances

Formula : C<sub>22</sub>H<sub>21</sub>O<sub>2</sub>P

Molecular weight : 348.37 g/mol

CAS-No. : 75980-60-8

EC-No. : 278-355-8

Component	Classification	Concentration
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		
	Skin Sens. 1; Repr. 2; Aquatic Chronic 2; H317, H361, H411	≤100%

## Section 4 - First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

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

Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## Section 5 - Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)

Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)

## **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Oxides of phosphorus

## **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## **5.4 Further information**

No data available

## Section 6 - Accidental release measures

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

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

### **6.4 Reference to other sections**

For disposal see section 13.

## Section 7 - Handling and storage

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

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

Light sensitive.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## Section 8 - Exposure controls/personal protection

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

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

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)

Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)

## **Personal protective equipment**

### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail [sales@kcl.de](mailto:sales@kcl.de), test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **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, Aldrich-415952 Page 5 of 9

The life science business of Merck operates as MilliporeSigma in the US and Canada

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)

Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)

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).

## **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Section 9 - Physical and chemical properties

### **9.1 Information on basic physical and chemical properties**

Appearance yellow powder

Odour No data available

Odour Threshold No data available

pH No data available

Melting point/freezing point Melting point/range: 88 - 92 °C - lit.

Initial boiling point and boiling range > 200 °C - dec.

Flash point No data available

Evaporation rate No data available

Flammability (solid, gas) No data available

Upper/lower flammability or explosive limits No data available

Vapour pressure No data available

Vapour density No data available

Relative density No data available

Water solubility 0.0001 g/l - OECD Test Guideline 105 - slightly soluble

Partition coefficient n-octanol/water log Pow: 3.1 at 23 °C

Auto-ignition temperature > 400 °C at 1,013.25 hPa

Decomposition temperature No data available

Viscosity No data available

Explosive properties No data available

Oxidizing properties No data available

### **9.2 Other safety information**

Bulk density 530 kg/m<sup>3</sup>

## Section 10 - Stability and reactivity

### **10.1 Reactivity**

No data available

### **10.2 Chemical stability**

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

No data available

### **10.4 Conditions to avoid**

No data available

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)

Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)

## 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus

Other decomposition products - No data available

In the event of fire: see section 5

## Section 11 - Toxicological information

### Acute toxicity

no data available

### 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

No data available

### Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

### Aspiration hazard

no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)

Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)

## Signs and Symptoms of Exposure

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

## Additional Information

### Section 12 - Ecological information

#### 12.1 Toxicity

Toxicity to fish

semi-static test LC50 - *Oryzias latipes* (Orange-red killifish) - 6.53 mg/l - 48 h

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - *Daphnia magna* (Water flea) - 3.53 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae

static test EC10 - *Pseudokirchneriella subcapitata* (green algae) - 1.56 mg/l - 72 h

(OECD Test Guideline 201)

static test EC50 - *Pseudokirchneriella subcapitata* (green algae) - > 2.01 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria

static test EC50 - activated sludge - > 1,000 mg/l - 3 h

(OECD Test Guideline 209)

Remarks: (above the solubility limit in the test medium)

#### 12.2 Persistence and degradability

Biodegradability

aerobic - Exposure time 28 d

Result: 0 - 10 % - Not readily biodegradable.

(OECD Test Guideline 301F)

#### 12.3 Bioaccumulative potential

Bioaccumulation

*Cyprinus carpio* (Carp) - 56 d at 25 °C(Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

Bioconcentration factor (BCF): 23 - 55

Remarks: (External MSDS)

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Toxic to aquatic life with long lasting effects.

### Section 13 - Disposal considerations

# Taian Green Industry Co., Ltd.

Tel: 86-156-6659-0861

E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)

Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)

## 13.1 Waste treatment methods

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

## Section 14 - Transport information

### 14.1 UN number

ADR/RID: 3077

IMDG: 3077

IATA: 3077

### 14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

### 14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

### 14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

### 14.5 Environmental hazards

ADR/RID: YES

IMDG Marine pollutant: YES

IATA: YES

### 14.6 Special precautions for user

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## Section 15 - Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

## Section 16 - Further information

Copyright 2018 Taian Green Industry Co., Ltd License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this



# Taian Green Industry Co., Ltd.

**Tel: 86-156-6659-0861**

**E-mail: [greenindustry@163.com](mailto:greenindustry@163.com)**

**Web: [www.taiangreenindustry.com](http://www.taiangreenindustry.com)**

document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Taian Green Industry Co.,Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.

-----End-----