



## SAFFTY DATA SHEET

### According to GHS Globally Harmonised System

819

#### 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

##### *Product identifier*

Product name: Bis(2,4,6-trimethylbenzoyl) Phenylphosphine Oxide

CAS number: 162881-26-7

ELINCS number: 423-340-5

Trade name: VL-1080

##### *Recommended use of the chemical and restrictions on use*

Relevant identified uses: Photo initiator for UV-cure. may be used in UV curable inks, prepregs and clear-pigmented coatings for applications on wood, metal, plastic, paper and optical fibers.

Uses advised against: No data available.

#### 2. HAZARDS IDENTIFICATION

##### *GHS classification of the substance/mixture*

Hazard classes and Hazard Categories: Skin Sens. 1  
Aquatic Chronic 4

Hazard Statement code(S) H317  
H413

Additional information: Full text of H-statement(s):see section 16

##### *GHS label elements*

Substance: Bis(2,4,6-trimethylbenzoyl) Phenylphosphine Oxide

Hazard pictograms:



GHS07  
Wng

Signal word: Warning

Hazard statements: H317 May cause an allergic skin reaction.  
H413 May cause long lasting harmful effects to aquatic life.

Hazard symbol(s): Xi Irritant

Prevention: P280 Wear protective gloves.



- R-phrases(s):** R43 May cause sensitization by skin contact.  
R53 May cause long-term adverse effects in the aquatic environment.
- S-phrases(s):** S22 Do not breathe dust.  
S24 Avoid contact with skin.  
S37 Wear suitable gloves.  
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**Other Hazard**

Not available.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Ingredients information**

<i>Chemical name</i>	<i>synonyms</i>	<i>EC No.</i>	<i>CAS No.</i>	<i>Classification according to GHS</i>	<i>Concentration</i>
Bis(2,4,6-trimethylbenzoyl) Phenylphosphine Oxide	Phenylbis (2,4,6-trimethylbenzoyl) phosphine oxide	423-340-5	162881-26-7	Skin Sens. 1 Aquatic Chronic 4 H317 H413	99+%

**Additional information**

Full text H-statement(s):see section 16.

The rest unspecified ingredients are impurities, and they are not hazard.

### 4. FIRST AID MEASURES

**Description of first aid measures**

- General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- Skin contact:** Wash off with soap and plenty of water. Consult a physician.
- Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media**

**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.

**Special hazard arising from the substance or mixture**



Contaminated water from fire hoses or sprinklers, etc., must be prevented from draining into watercourses, sewers, or the ground water. Sufficient measures must be taken to retain water used for extinguishing. Contaminated water and soil must be disposed of in conformity with local regulations.

***Special protective equipment and precautions for firefighters***

Wear full protective clothing. Wear self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

***Environmental precautions***

Do not let product enter drains. Discharge into the environment must be avoided.

***Methods and material 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***

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

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

***Control parameters***

**Exposure limit values:** No data available.

***Appropriate engineering controls***

Provide exhaust ventilate or other engineer control to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

***Individual protection measures –personal protective equipment***

**Respiratory:** Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



- Hand protection:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.  
Handle with gloves.
- Eye protection:** Face shield and safety glasses
- Skin 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.

*Environmental exposure controls*

Do not allow material to be released to the environment without the proper governmental permits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

*Information on basic physical and chemical properties*

- State:** Powder or crystal
- Color:** Yellowish
- Odour:** not tested
- Melting/freezing temperature:** 127-133°C
- Boiling point/range 98.3 kPa:** not tested
- Density:** 1.17 g/cm<sup>3</sup> 20°C 760Torr
- Flash point:** not tested
- Ignition Temperature:** not tested
- Oxidising properties:** not tested
- Self-ignition temperature:** not tested
- Water solubility 20 °C:** not tested
- Vapour pressure 20 °C:** not tested
- Partition coe.; Log Pow 20-25 °C ;** not tested
- pH-value:** not tested
- Explosive properties:** not tested

## 10. STABILITY AND REACTIVITY

*Decomposition temperature*

Stable under recommended storage conditions.

*Conditions to avoid*



No data available.

**Materials to avoid**

Oxidizing agents, Strong acids, Strong bases

**Hazardous decomposition products**

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

## 11. TOXICOLOGICAL INFORMATION

**Information on the likely routes of exposure**

**Acute toxicity:** No data available.

**Respiratory or skin sensitization:** May cause allergic skin reaction.

**CMR effects(Carcinogenicity, Mutagenicity and Toxicity for Reproduction)**

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.

**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.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No data available.

**Biodegradability**

No data available.

**Other adverse effects**

May cause long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products**

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

##### *ADR/RID*

Not dangerous goods.

##### *IMO*

Not dangerous goods.

##### *ICAO*

Not dangerous goods.

#### 15. REGULATORY INFORMATION

##### *US federal and state regulations*

**TSCA:** CAS #162881-26-7 is listed on the TSCA Inventory.

##### *European union regulations*

**ELINCS:** CAS #162881-26-7 is listed on the Inventory.

##### *China regulation*

**IECSC:** CAS# 162881-26-7 is listed on the IECSC inventory.

##### *Other chemical inventories*

**Canada – DSL/NDSL:** CAS #162881-26-7 is listed on the Inventory.

**Australia AICS** CAS #162881-26-7 is listed on the Inventory.

**New Zealand:** CAS #162881-26-7 is listed on the Inventory.

**Japan ENCS (MITI):** CAS #162881-26-7 is listed on the Inventory.

**Korea ECL:** CAS #162881-26-7 is listed on the Inventory.

**Philippines PICCS :** CAS #162881-26-7 is listed on the Inventory.

**Switzerland SWISS :** CAS #162881-26-7 is listed on the Inventory.

#### 16. OTHER INFORMATION

##### *Text of H-code(s) and R-phrases mentioned in Section 3*

Aquatic Chronic Chronic aquatic toxicity

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

Skin Sens. Skin sensitization

Xi Irritant

R43 May cause sensitization by skin contact.

R53 May cause long-term adverse effects in the aquatic environment.

##### *Other information*



Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.