



SAFFTY DATA SHEET

According to GHS Globally Harmonised System

TPO

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

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

CAS number: 75980-60-8

EINECS number: 278-355-8

Product code: VL-1050

Use/description of product: Photo initiator for UV-cure.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Contains: Diphenyl (2,4,6-trimethylbenzoyl)-phosphine oxide 99+%

3. HAZARDS IDENTIFICATION

Main hazards: Non – Harmful

4. FIRST AID MEASURES

General advice: Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary.

Skin contact: Wash off with soap and plenty of water.

Eye contact: Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

Ingestion: Immediately rinse mouth and then drink plenty of water, summon physician.

Inhalation: Keep patient calm, remove to fresh air, summon medical help.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray, foam, dry extinguishing media, carbon dioxide (CO₂).

6. ACCIDENTAL RELEASE MEASURES

Clean-up procedures: Sweep/shovel up.

7. HANDLING AND STORAGE

Handling requirements: Provide appropriate exhaust ventilation at machinery.
Protection against fire and explosion: Take precautionary measures against static discharges.

Storage conditions: Store cool. Protect contents from the effects of light.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



Exposure limit(s): internal exposure limit (8 hour time weighted average)

Value 10 mg/m³ Justification to exposure limit.

Exposure limit for inhalable dust.

Technical measures/Precautions: Exposure limit(s) should be monitored using suitable analytical equipments.

Respiratory: If ventilation is inadequate, dust mask
Filter P2 (for solid and liquid particles) (DIN 3181)

Hand protection: Chemical resistant gloves.

Eye protection: Suitable goggles.

Skin protection: Hands and/or face should be washed before breaks and at the end of the shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

State: powder or crystal

Color: Pale yellow

Odour: Characteristic odour

Melting/freezing temperature: 91-94°C

Boiling point/range: 519.6°C

Density 20 °C: 1.17 g/cm³

Flash point: 121 °C

Ignition Temperature: 380 °C

Oxidising properties: not tested

Self-ignition temperature: not tested

Water solubility 25 °C: 0.013 g/L

Vapour pressure 25 °C: 6.71E-11 Torr

Partition coe. Log Pow 20 °C: not tested

pH-value: not tested

Dynamic Viscosity 20 °C: not tested

Explosive properties: not tested

10. STABILITY AND REACTIVITY

Thermal decomposition: No decomposition if used as directed.

Hazardous reactions: None provided product is correctly processed.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity: Rat



LD50 > 5000 mg/kg

Acute dermal irritation/corrosion: Rabbit
not irritant

Acute eye irritation/corrosion: Rabbit
not irritant

Reproduction toxicity: reproduction toxicity tested in vivo: rat
After oral administration at high concentrations: Risk of impaired fertility.

12. ECOLOGICAL INFORMATION

Acute toxicity to fish: EC50 (96 h): 10–100mg/l, *Leuciscus idus*

Acute toxicity to daphnia: EC50 (48 h): 10–100mg/l

Acute toxicity to bacteria: EC50 (17 h): >500mg/l, DIN 38412 Part 8

Acute toxicity to algae: EC50 (72 h): 10–100mg/l

Behaviour and environmental fate: Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Elimination information: The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.
Do not discharge product into natural waters without pretreatment (biological treatment plant).

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Residual chemical should be disposed by incineration or by other modes of disposal in compliance with local legislation.

14. TRANSPORT INFORMATION

Not classified as hazardous under transport regulations.

15. REGULATORY INFORMATION

Hazard symbols: Xn – Harmful

Risk phrases: R62 – Possible risk of impaired fertility.
R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in aquatic environment.

Safety phrases: S22 – Do not breathe dust.
S61 – Avoid release to the environment. Refer to special instructions/Safety data sheets.

National legislation/regulations: Water hazard class: 2 (VwVwS (Germany) of 17.5.1999, Annex 3)
TA Luft(Germany): Class II, number 3.1.7

16. OTHER INFORMATION

Other information: Employers should use this information only as a supplement to



other information gathered by them, and should make independent judgement 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.

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