**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**
primopattern clear

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Use of the substance/mixture**
light curing resin for technical applications

**1.3. Details of the supplier of the safety data sheet**

- **Company name:** primotec - Joachim Mosch e.K
- **Street:** Tannenwaldallee 4
- **Place:** D-61348 Bad Homburg
- **Telephone:** +49 (0)6172-997700-0  
  **Telefax:** +49 (0)6172-997700-99
- **e-mail:** primotec@primogroup.de
- **Internet:** www.primogroup.de
- **Responsible Department:** F&E
  
**1.4. Emergency telephone number:**
Giftinformationszentrum Universitätsklinikum Mainz

- **Telefon:** +49 (0)6131-19240

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Regulation (EC) No. 1272/2008**

- **Hazard categories:**
  - Hazardous to the aquatic environment: Aquatic Chronic 4
- **Hazard Statements:**
  - May cause long lasting harmful effects to aquatic life.

**2.2. Label elements**

**Regulation (EC) No. 1272/2008**

**Hazard statements**

- H413 May cause long lasting harmful effects to aquatic life.

**Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection.
- P273 Avoid release to the environment.
- P501 Dispose of contents/container in accordance with local regulation.

**Special labelling of certain mixtures**

- EUH208 Contains Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO). May produce an allergic reaction. Restricted to professional users.

**2.3. Other hazards**

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Chemical characterization**

Mixture of acrylic resins and initiators.
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
<th>EC No</th>
<th>Index No</th>
<th>REACH No</th>
<th>GHS Classification</th>
<th>Aquatic Chronic</th>
<th>H413</th>
<th>&lt; 1 %</th>
<th>278-355-8 015-203-00-X</th>
<th>Repr. 2, Skin Sens. 1, Aquatic Chronic 2; H361f H317 H411</th>
</tr>
</thead>
<tbody>
<tr>
<td>75980-60-8</td>
<td>Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acrylic resin</td>
<td>H413</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours. Take off all contaminated clothing immediately.

After inhalation
Provide fresh air. Medical treatment necessary.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes
After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion
Do NOT induce vomiting. Medical treatment necessary.

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Foam. Extinguishing powder Carbon dioxide

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture
In case of fire may be liberated: Carbon monoxide Carbon dioxide Hazardous decomposition products

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Provide good room ventilation.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C. Can polymerize with intense heat release.

Hints on joint storage
No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective and hygiene measures
Avoid contact with skin, eyes and clothes. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection
tightly fitting goggles

Hand protection
Gloves should be replaced regularly, especially after extended contact with the product. For each work-place a suitable glove type has to be selected.

Skin protection
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Gel
Colour: clear
Odour: characteristic
pH-Value: not determined

Changes in the physical state
## SECTION 10: Stability and reactivity

### 10.1. Reactivity
No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions
Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

### 10.4. Conditions to avoid
Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C. Can polymerize with intense heat release.

### 10.5. Incompatible materials
- Oxidising agent
- Reducing agent
- Heavy metals
- Acids
- Alkali (lye)

### 10.6. Hazardous decomposition products
No known hazardous decomposition products.

---

### Melting point:
not determined

### Initial boiling point and boiling range:
not determined

### Flash point:
> 150 °C

### Flammability

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

### Lower explosion limits:
not determined

### Upper explosion limits:
not determined

### Auto-ignition temperature

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

### Decomposition temperature:
not determined

### Vapour pressure:
not determined

### Density:
1.1 g/cm³

### Water solubility:
The study does not need to be conducted because the substance is known to be insoluble in water.

### Solubility in other solvents
The substance is not soluble in water.

### Partition coefficient:
not determined

### Viscosity / dynamic:
250 * 1000 mPa·s (at 20 °C)

### Vapour density:
not determined

### Evaporation rate:
not determined

### Solid content:
not determined

### Product has not been tested. The statement is derived from the properties of the components.
### 11.1. Information on toxicological effects

**Acute toxicity**

Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>75980-60-8</td>
<td>Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO)</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 5000</td>
<td>Rat</td>
<td>RTECS</td>
</tr>
</tbody>
</table>

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

**Sensitising effects**

Contains Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO). May produce an allergic reaction. Possible sensitization in case of persons suffering from hypersensitivity.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Further information**

Product has not been tested. The statement is derived from the properties of the components.

### SECTION 12: Ecological information

#### 12.1. Toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>75980-60-8</td>
<td>Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO)</td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>3,53</td>
<td>48 h</td>
<td>Daphnia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

The product has not been tested.

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The product has not been tested.

#### 12.6. Other adverse effects

No information available.

**Further information**

Do not allow uncontrolled discharge of product into the environment. Do not allow to enter into surface water or drains.

### SECTION 13: Disposal considerations
13.1. Waste treatment methods

Disposal recommendations
Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>070208</td>
<td>WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other still bottoms and reaction residues; hazardous waste</td>
</tr>
</tbody>
</table>

List of Wastes Code - contaminated packaging

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>070208</td>
<td>WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other still bottoms and reaction residues; hazardous waste</td>
</tr>
</tbody>
</table>

Contaminated packaging
This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)
Other applicable information (land transport)
No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)
Other applicable information (inland waterways transport)
No dangerous good in sense of these transport regulations.

Marine transport (IMDG)
Other applicable information (marine transport)
No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)
Other applicable information (air transport)
No dangerous good in sense of these transport regulations.

14.6. Special precautions for user
No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
not applicable

SECTION 15: Regulatory information

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

National regulatory information
Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes
SECTION 1: Identification

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.
EUH208 Contains Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO). May produce an allergic reaction.

Further Information
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)