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

1.1 Product identifier

Trade name

VarseoWax® Model (REF 41010, 41030)

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

Relevant identified uses of the substance or mixture

Photopolymer for manufacturing dental models in 3D printing process

Uses advised against No data available.

1.3 Details of the supplier of the safety data sheet

Address

BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG Wilhelm-Herbst-Str. 1 28359 Bremen

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 msds@bego.com

Information provided by / telephone

Research & Development Department - Materials, alloys and ceramics; +49/ 421/ 2028 - 130 (Chief Development Officer alloys)

Advice on Safety Data Sheet msds@bego.com

1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 4; H413

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



Signal word Warning

Hazardous component(s) to be indicated on label:

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.´-[(1-methylethylidene)di-4 1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

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| H315 | Causes skin irritation. |
|---------------------|--|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| Precautionary state | ements |
| P261 | Avoid breathing spray. |
| P280 | Wear protective gloves/eye protection. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P501 | Dispose of contents/container to a facility in accordance with local and natior regulations. |

2.3 Other hazards

PBT assessment No data available. vPvB assessment No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

| No | Substance name | | | Additional information | | |
|----|----------------------|--|------|------------------------|--------|-----------------|
| | CAS / EC / Index / | Classification (EC) 1272/2008 (CLP) | Conc | entration | | % |
| | REACH no | | | | | |
| 1 | Poly(oxy-1,2-ethan | ediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4 | | | | |
| | 1-phenylene]bis[.or | mega[(2-methyl-1-oxo-2-propenyl)oxy]- | | | | |
| | 41637-38-1 | Eye Irrit. 2; H319 | | < | 100.00 | % - b.w. |
| | - | Skin Irrit. 2; H315 | | | | |
| | - | Skin Sens. 1; H317 | | | | |
| | - | STOT SE 3; H335 | | | | |
| 2 | phenyl bis(2,4,6-tri | methylbenzoyl)-phosphine oxide | | | | |
| | 162881-26-7 | Aquatic Chronic 4; H413 | > | 1.00 - < | 5.00 | %-b.w. |
| | - | Skin Sens. 1; H317 | | | | |
| | 015-189-00-5 | | | | | |
| | - | | | | | |

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

If the patient is likely to become unconscious, place and transport in stable sideways position. In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with copious amounts of water.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.



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After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** No data available.
- **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

Carbon dioxide; Extinguishing powder; Water spray jet; Alcohol-resistant foam

Unsuitable extinguishing media High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Adapt extinguisher and fire-fighting measures to fire in the environment. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away sources of ignition. Refer to protective measures listed in sections 7 and 8.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Pick up rest with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Take precautionary measures against static charges. Keep away from sources of heat and ignition. When heating the product, explosive vapour-air mixtures can be formed.



Current version : 3.0.0. issued: 23.03.2016 Replaced version: 2.0.1, issued: 19.10.2015 Region: GB 7.2 Conditions for safe storage, including any incompatibilities Technical measures and storage conditions Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. **Recommended storage temperature** Value max 25 °C Requirements for storage rooms and vessels Keep only in the original container. Containers which are opened must be carefully closed and kept upright to prevent leakage. Advice on storage assembly Do not store together with: Oxidizing agents 7.3 Specific end use(s) No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Form/Colour | | | |
|-------------------------------|---|-----|----|
| liquid, viscous | | | |
| clear to opaque | | | |
| Odour | | | |
| ester-like | | | |
| Odour threshold | | | |
| No data available | | | |
| pH value | | | |
| No data available | | | |
| Boiling point / boiling range | | | |
| Value | > | 100 | °C |



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| Molding weight / wolding you go | | | | |
| Melting point / melting range No data available | | | | |
| | | | | |
| Decomposition point / decomposition range No data available | je | | | |
| | | | | |
| Flash point | | | | |
| Value | > | 93 | C | |
| Auto-ignition temperature | | | | |
| Value | | 430 | °C | |
| Oxidising properties | | | | |
| No data available | | | | |
| Explosive properties | | | | |
| No data available | | | | |
| Flammability (solid, gas) | | | | |
| No data available | | | | |
| | | | | |
| Lower flammability or explosive limits No data available | | | | |
| | | | | |
| Upper flammability or explosive limits | | | | |
| No data available | | | | |
| Vapour pressure | | | | |
| No data available | | | | |
| Vapour density | | | | |
| No data available | | | | |
| Evaporation rate | | | | |
| No data available | | | | |
| Relative density | | | | |
| No data available | | | | |
| Density | | | | |
| Value | 1.1 | 11 - 1.15 | g/cm ³ | |
| Reference temperature | | 20 | °C | |
| Solubility in water | | | | |
| Remarks | slightly so | oluble | | |
| Solubility(ies) | | | | |
| Remarks | soluble in | most of organic | solvents | |
| | | | | |
| Partition coefficient: n-octanol/water No data available | | | | |
| Viscosity | | | | |
| Value | 80 | 00 - 1500 | mPa*s | |
| Туре | dynamic | 1000 | | |
| | | | | |
| 2 Other information | | | | |
| Other information | | | | |

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).



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10.3 Possibility of hazardous reactions

None, if handled according to order.

- **10.4 Conditions to avoid** Heat, naked flames and other ignition sources. Protect from sun.
- **10.5** Incompatible materials strong oxidizing agents
- **10.6 Hazardous decomposition products** No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| Acute oral toxicity |
|--|
| No data available |
| Acute dermal toxicity |
| No data available |
| Aguta inhalational taxiaity |
| Acute inhalational toxicity No data available |
| |
| Skin corrosion/irritation No data available |
| |
| Serious eye damage/irritation |
| No data available |
| Respiratory or skin sensitisation |
| No data available |
| Germ cell mutagenicity |
| No data available |
| Reproduction toxicity |
| No data available |
| Carcinogenicity |
| No data available |
| STOT-single exposure |
| No data available |
| STOT-repeated exposure |
| No data available |
| |
| Aspiration hazard No data available |
| |
| Delayed and immediate effects as well as chronic effects from short and long-term exposure |
| Inhalation of vapours may lead to headache, drowsiness and dizziness. |

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SECTION 12: Ecological information

12.1 Toxicity

| Toxicity to fish (acute) | |
|--------------------------|--|
|--------------------------|--|

No data available

Toxicity to fish (chronic) No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

| Results of PBT and vPvB assessment | | | |
|------------------------------------|--------------------|--|--|
| PBT assessment | No data available. | | |
| vPvB assessment | No data available. | | |

12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.



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SECTION 14: Transport information

14.1 Transport ADR/RID/ADN The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG The product is not subject to IMDG regulations.

- **14.3 Transport ICAO-TI / IATA** The product is not subject to ICAO-TI / IATA regulations.
- **14.4 Other information** No data available.
- **14.5** Environmental hazards Information on environmental hazards, if relevant, please see 14.1 - 14.3.
- **14.6** Special precautions for user No data available.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not relevant

SECTION 15: Regulatory information

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

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

| Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFA THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS | , |
|---|------|
| The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII. | No 3 |

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Department issuing safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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