

Trade name: VarseoWax® Surgical Guide (REF 41012, 41032)

Current version : 3.0.0, issued: 23.03.2016

Replaced version: 2.0.1, issued: 19.10.2015

Region: GB

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

### 1.1 Product identifier

Trade name

**VarseoWax® Surgical Guide (REF 41012, 41032)**

### 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 drilling templates for implant prosthetics 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

Telephone no. +49/ 421/ 2028 – 0

Fax no. +49/ 421/ 2028 – 115

e-mail 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**



GHS07

**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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**Hazard statements**

- 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 statements**

- 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 national 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 / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	<b>Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.-[(1-methylethylidene)di-4-1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-</b>		
	41637-38-1	Eye Irrit. 2; H319	< 100.00 %-b.w.
	-	Skin Irrit. 2; H315	
	-	Skin Sens. 1; H317	
	-	STOT SE 3; H335	
2	<b>phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide</b>		
	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 (CO<sub>2</sub>)

#### 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.

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## 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
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### 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

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

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<b>Melting point / melting range</b>	
No data available	
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
Value	> 93 °C
<b>Auto-ignition temperature</b>	
Value	430 °C
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
No data available	
<b>Flammability (solid, gas)</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
No data available	
<b>Upper flammability or explosive limits</b>	
No data available	
<b>Vapour pressure</b>	
No data available	
<b>Vapour density</b>	
No data available	
<b>Evaporation rate</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
Value	1.11 - 1.15 g/cm <sup>3</sup>
Reference temperature	20 °C
<b>Solubility in water</b>	
Remarks	slightly soluble
<b>Solubility(ies)</b>	
Remarks	soluble in most of organic solvents
<b>Partition coefficient: n-octanol/water</b>	
No data available	
<b>Viscosity</b>	
Value	800 - 1500 mPa*s
Type	dynamic

**9.2 Other information**

<b>Other information</b>
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

#### 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

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
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

<b>Results of PBT and vPvB assessment</b>	
PBT assessment	No data available.
vPvB assessment	No data available.

### 12.6 Other adverse effects

No data available.

### 12.7 Other information

<b>Other information</b>
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 MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3
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#### **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**

UMCO Umwelt Consult GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 183, Tel.: +49(40)79 02 36 300, Fax: +49(40)79 02 36 357, e-mail: umco@umco.de



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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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