

## Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 08.10.2020

Temporary CB A2, A3, C2, B1

### SECTION 1: Identification

#### 1.1 Product identifier

Trade name

Temporary CB A2

Temporary CB A3

Temporary CB C2

Temporary CB B1

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

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

Resin for 3D printing of crown and bridge restorations

**Restrictions on use**

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

**Supplier**

Formlabs, Inc.  
35 Medford St  
Suite 201 Somerville, MA 02143

+1 617-855-0762

#### 1.4 Emergency phone number

CHEMTREC  
1-800-424-9300 (24/7)

### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the chemical

**GHS Classification**

Eye Irritation - Category 2A

Reproductive Toxicity - Category 1B

Skin Corrosion / Irritation - Category 2

Skin sensitization - Category 1

Skin sensitization - Category 1B

Specific Target Organ Toxicity - Single Exposure - respiratory tract irritation - Category 3

#### 2.2 Label elements

**Pictogram(s)**

**Signal word**



Danger

**Hazard Statement(s)**

Health hazards

Causes skin irritation  
May cause an allergic skin reaction  
Causes serious eye irritation  
May cause respiratory irritation  
May damage fertility or the unborn child.

**Precautionary Statement(s)**

Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing dust/fume/gas/mist/vapours/spray.

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Response	Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.  Contaminated work clothing must not be allowed out of the workplace. Wear personal protective equipment/face protection. If on skin: Wash with plenty of water and soap. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see first aid instruction on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container to a facility in accordance with local and national regulations.

### 2.3 Labelling information

No data available

### 2.4 Hazards not otherwise classified (HNOC)

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	Concentration	%
1	<b>Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid</b>		
	41637-38-1	>= 50.00 - < 70.00	%-b.w.
2	<b>diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide</b>		
	75980-60-8	< 2.50	%-b.w.

### 3.3 Other information

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of 29 CFR 1910.1200

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### General information

In case of allergic symptoms, especially respiratory tract related, seek medical help immediately. 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. In case of persisting adverse effects, consult a physician.

#### After skin contact

In case of contact with skin wash off immediately with plenty of water. Consult a doctor if skin irritation persists.

#### After eye contact

Remove contact lens. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get medical attention if pain still persists.

#### After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Take medical treatment.

### 4.2 Most important symptoms and effects, both acute and delayed

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No data available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### Unsuitable extinguishing media

Full water jet

### 5.2 Specific hazards arising from the chemical

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>); Phosphorus oxides

### 5.3 Special protective equipment and precautions for fire-fighters

Use self-contained breathing apparatus. 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 from ignition sources. Do not inhale vapours. 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 Methods and materials for containment and cleaning up

Take up with absorbent material (e.g., sand, diatomaceous earth, universal binder). When collected, handle material as described under the section heading "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Risks inherent to handling the product must be minimised by applying appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

#### 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 food, drink and animal feeding stuffs. Avoid contact with eyes and skin. Provide eye wash fountain in work area.

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

### 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.

#### Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original.

#### Incompatible products

Do not store together with: Oxidizing agents

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

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### 8.2 Exposure controls

#### Appropriate engineering controls

Provide good ventilation of working area (local exhaust ventilation if necessary).

#### Individual protection measures, such as 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

##### Hand protection

Sufficient protection is given wearing suitable protective gloves in the event of risk of skin contact with the product. Before use, the protective glove 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 protection measures

Chemical-resistant work clothes.

## SECTION 9: Physical and chemical properties

<b>Form/Color</b>	
liquid	
Various, depending on coloration	
<b>Odor</b>	
No data available	
<b>Odor threshold</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
Value	150 °C
<b>Melting point / melting range</b>	
No data available	
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
Value	110 °C
<b>Auto-ignition temperature</b>	
No data available	
<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>	

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No data available

**Vapor pressure**

No data available

**Vapor density**

No data available

**Evaporation rate**

No data available

**Relative density**

No data available

**Density**

Value	1.4	-	1.5	g/cm <sup>3</sup>
Reference temperature			20	°C

**Solubility in water**

No data available

**Solubility(ies)**

No data available

**Partition coefficient: n-octanol/water**

No	Substance name	CAS no.	EC no.
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1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	
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with reference to | pH: 6.4

**Viscosity**

No data available

**Other information**

**Other information**

No data available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

No data available.

**10.2 Chemical stability**

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

**10.3 Possibility of hazardous reactions**

None, when used as directed.

**10.4 Conditions to avoid**

Heat, open flames and other sources of ignition.

**10.5 Incompatible materials**

strong oxidizing agents

**10.6 Hazardous decomposition products**

No hazardous decomposition products known. In case of fire: see section 5 .

## SECTION 11: Toxicological information

**Information on toxicological effects**

**Acute oral toxicity**

No data available

**Acute dermal toxicity**

No data available

**Acute inhalational toxicity**

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## Skin corrosion/irritation

No data available

No data available

## Serious eye damage/irritation

No data available

## Respiratory or skin sensitization

No	Substance name	CAS no.
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8
Route of exposure		Skin
Species		mouse
Method		OECD 429
Source		ECHA
Evaluation		sensitizing

## Germ cell mutagenicity

No data available

## Reproduction toxicity

No	Substance name	CAS no.
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8
Route of exposure		oral
Evaluation/classification		May damage fertility.
Method		OECD 421
Source		ECHA
Species		rats (male/female)

## Carcinogenicity

No data available

## NTP Report on Carcinogens (RoC)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed "known" (to be a human carcinogen) or "RAHC" (reasonably anticipated to be a human carcinogen).

## OSHA Standards listing cancer as a health effect (Table VII.6.2)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed as carcinogenic.

## IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

The product contains following substance(s) classified by the IARC Monographs

No	Substance name	CAS no.	Group
1	diron trioxide	1309-37-1	3
2	titanium dioxide	13463-67-7	2B

## STOT - single exposure

No data available

## STOT - repeated exposure

No data available

## Aspiration hazard

No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	
LC50		1.4	mg/l
Duration of exposure		96	h

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Species	Cyprinus carpio
Method	OECD 203
Source	ECHA

<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

## 12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	
Value		0	%
Dauer		28	day(s)
Method	OECD 301 F		
Source	ECHA		
Evaluation	The product is not biodegradable.		

## 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	
with reference to		pH: 6.4	

## 12.4 Mobility in soil

No data available.

## 12.5 Other adverse effects

No data available.

## 12.6 Other information

<b>Other information</b>
Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1 Disposal considerations

#### Product

Dispose in accordance with federal, state and local regulations.

#### 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 accordance with federal, state and local regulations.

## SECTION 14: Transport information

### 14.1 US DOT (Department of Transportation)

The product is not subject to DOT regulations.

### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

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## 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, pls. 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 73/78 and the IBC Code

Not relevant

## SECTION 15: Regulatory information

### 15.1 US Federal Regulations

#### Toxic Substances Control Act (TSCA)

According to the data available and/or specifications supplied by upstream suppliers, all components of this product are on the TSCA Inventory or are exempted from notification requirements.

#### CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being subject to Table 302.4 "List of Hazardous Substances and Reportable Quantities".

#### Clean Air Act (CAA): Hazardous Air Pollutants (HAPS)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being "Hazardous Air Pollutants".

#### Clean Water Act (CWA) Section 307 (Toxic Pollutants) and Section 311 (Hazardous Substances)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being "Hazardous Substances".

#### EPCRA SARA Section 313, Toxic Chemical Release Inventory

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being subject to "SARA Reporting".

#### Emergency Planning & Community Right-to-Know Act (EPCRA) - Sections 302 and 304

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being subject to reporting requirements.

#### Clean Air Act (CAA) - Section 602 Ozone depleting substances

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) listed as ozone depleting substance.

### 15.2 US State Regulations

#### Pennsylvania State Right to Know Hazardous Substance List

The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.
1	diiron trioxide	1309-37-1
2	titanium dioxide	13463-67-7

#### New Jersey State Right to Know Hazardous Substance List

The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.
1	diiron trioxide	1309-37-1

2	titanium dioxide	13463-67-7
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#### Massachusetts State Right to Know Hazardous Substance List

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substance(s) that are considered being "Hazardous Substances".

#### Right to Know - California State - Proposition 65



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The product contains following substance(s) that are considered being "Hazardous Substances".

No	Substance name	CAS no.	type of toxicity
1	titanium dioxide	13463-67-7	cancer

## SECTION 16: Other information, including date of preparation or last revision

### 16.1 Other information

No data available.

### 16.2 Date of preparation/revision of the SDS

Current version 1.0.0 22.07.2020  
Replaced version - -

### 16.3 Department issuing safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

### 16.4 Conclusions

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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Prod-ID 765421

### 16.5 Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists  
ATE - Acute Toxicity Estimate  
BOD - Biochemical Oxygen Demand  
CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania  
CAS - Chemical Abstracts Service  
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
CFR - Code of Federal Regulations (US)  
CLP - Classification, Labelling, and Packaging  
DOT - Department of Transportation Commission  
ECHA - European Chemicals Agency  
EC / EL - Effective Concentration / Effective Loading  
EPA - Environmental Protection Agency  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IBC - Intermediate Bulk Container  
ICAO - International Civil Aviation Organization  
IDL - Ingredient Disclosure List  
IDLH - Immediately Dangerous to Life and Health  
IMDG - International Maritime Dangerous Goods  
IUCLID - International Uniform Chemical Information Database  
Kow - Octanol/water partition coefficient  
LD/LC - Lethal Dose/ Lethal Concentration  
MARPOL - Marine Pollution  
MEL - Maximum Exposure Limits  
NFPA - National Fire Protection Agency  
NIOSH - National Institute for Occupational Safety and Health  
NJTSR - New Jersey Trade Secret Registry  
NOEL/NOEC - No Observed Effect Level / No Observed Effect Concentration  
NTP - National Toxicology Program  
OSHA - Occupational Safety and Health Administration  
PEL - Permissible Exposure Limit

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RCRA - Resource Conservation and Recovery Act  
SARA - Superfund Amendments and Reauthorization Act  
STEL - Short-term Exposure Limit  
STOT – Specific Target Organ Toxicity  
TDG - Transportation of Dangerous Goods  
TLV - Threshold Limit Value  
TSCA - Toxic Substances Control Act  
TWA - Time Weighted Average  
UN/NA - United Nations /North American  
US - United States  
VLE - Exposure Limit Value (Mexico)  
VOC – Volatile Organic Compounds