

Trade name: VarseoSmile Crown plus

**Product no.:** REF 41107US - REF 41123US

Current version: 1.0.0, issued: 12.01.2023 Replaced version: -, issued: - Region: USA

# **SECTION 1: Identification**

#### 1.1 Product identifier

Trade name

# VarseoSmile Crown plus

# 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 permanent single crowns, inlays, onlays and veneers

#### 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

#### 1.4 Emergency phone number

BEGO USA 1-774 571 0395

# SECTION 2: Hazard(s) identification

## 2.1 Classification of the chemical

# Classification of the chemical in accordance with paragraph (d) of 29 CFR § 1910.1200 "Hazard Communication"

Eye Irritation - Category 2A

Reproductive Toxicity - Category 1B Skin Corrosion / Irritation - Category 2

Skin sensitization - Category 1

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.

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 protective gloves/protective clothing/eye protection/face protection.



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Response 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.

Wash contaminated clothing before reuse.

Storage 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					
	CAS no.	Cor	ncentratio	n		%
1	Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-					
	methylprop-2-enoic acid					
	41637-38-1	>=	50.00	- <	70.00	%-b.w.
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide					
	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.

#### After skin contact

In case of contact with skin wash off immediately with plenty of water.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

#### After ingestion

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

# 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: 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



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

No parameters available for monitoring.

#### 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**

# Form/Color



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Γυ					
liquid Various, depending on coloration					
Odor					
No data available					
Odor threshold					
No data available					
pH value					
No data available					
Boiling point / boiling range	1	450	90		
Value		150	°C		
Melting point / melting range No data available					
Decomposition point / decomposition range  No data available					
Flash point					
Value		110	°C		
Auto-ignition temperature  No data available					
Oxidising properties					
No data available					
Explosive properties  No data available					
Flammability					
No data available					
Lower flammability or explosive limits  No data available					
Upper flammability or explosive limits  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 Reference temperature	1.4	- 1.5 20	g/cm³ °C		
Solubility in water		,			
No data available					
Solubility(ies)					
No data available					
Partition coefficient: n-octanol/water					
No Substance name 1 diphenyl(2,4,6-trimethylbenzoyl)phosphine ox	ride	CAS no. 75980-60-8		EC no.	
log Pow		1 0000-00-0	3.1		
Reference temperature	OFOD 447		23	°C	
Method Source	OECD 117 ECHA				
Viscosity					

# Other information

No data available

Other information	
No data available.	



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# **SECTION 10: Stability and reactivity**

#### 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.

#### Incompatible materials

strong oxidising agents

## 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

No data available

## Skin corrosion/irritation

No data available

# Serious eye damage/irritation

No data available

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

#### Germ cell mutagenicity

No data available

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

# 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 t	he IARC Monographs				
No	Substance name	CAS no.	Group			
1	diiron trioxide	1309-37-1	3			



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2	titanium dioxide	13463-67-7	2B	
STC	T - single exposure			
No o	lata available			
STC	T - repeated exposure			
	lata available			
Asp	iration hazard			
No	lata available			

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Toxic	city to fish (acute)			
No	Substance name	CAS no.		
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine ox	ide 75980-60-8		
LC50		1.	.4	mg/l
Dura	tion of exposure	96	6	h
Spec	cies	Cyprinus carpio		
Meth	od	OECD 203		
Sour	ce	ECHA		

# 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

12.2 Persistence and degradability

	orororor arra aogradamin's					
Biod	Biodegradability					
No	Substance name	CAS n	0.			
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine ox	ride 75980-	60-8			
Value	9		0	%		
Dura	tion		28	day(s)		
Meth	od	OECD 301 F		• • •		
Sour	ce	ECHA				
Evalu	uation	The product is not biod	egradable.			

12.3 Bioaccumulative potential

Parti	Partition coefficient: n-octanol/water					
No	Substance name		CAS no.			
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine ox	ide	75980-60-8			
log P	Pow			3.1		
Refe	rence temperature			23	°C	
Meth	od	OECD 117				
Sour	ce	ECHA				

## 12.4 Mobility in soil

No data available.

# 12.5 Other adverse effects

No data available.

#### 12.6 Other information

_	Other information
	Other information
	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**



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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.

#### 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.		

The following substances have EPA regulatory flags in the TSCA Inventory

1116	The following substances have EFA regulatory hags in the 130A inventory.			
No	Substance name	CAS no.	EPA TSCA	
			Regulatory Flags	
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	PMN	
2	Esterification products of 4,4'-isopropylidenediphenol,	41637-38-1	XU	
	ethoxylated and 2-methylprop-2-enoic acid			

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

The product contains following substance(s) that are considered being subject to Table 302.4 "List of Hazardous Substances and Reportable Quantities"

Rep	Reportable Quantities		
No	Substance name	CAS no.	
1	acetic acid	64-19-7	

# 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) The product contains following substance(s) that are considered to be "Hazardous Substances". No Substance name CAS no. 1 acetic acid 64-19-7

# **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

Penr	Pennsylvania State Right to Know Hazardous Substance List			
The	The product contains following substance(s) that are considered to be "Hazardous Substances".			
No	Substance name	CAS no.		
1	acetic acid	64-19-7		
2	diiron trioxide	1309-37-1		
3	titanium dioxide	13463-67-7		



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New Jersey State Right to Know Hazardous Substance List				
The	The product contains following substance(s) that are considered to be "Hazardous Substances".			
No	Substance name	CAS no.		
1	acetic acid	64-19-7		
2	diiron trioxide	1309-37-1		
3	titanium dioxide	13463-67-7		

Massachusetts State Right to Know Hazardous Substance List				
The	The product contains following substance(s) that are considered to be "Hazardous Substances".			
No	Substance name	CAS no.		
1	acetic acid	64-19-7		

California Code of Regulations Title 8 §339, Hazardous Substances List			
The product contains following substance(s) that are considered to be "Hazardous Substances".			
No	Substance name	CAS no.	
1	acetic acid	64-19-7	
2	diiron trioxide	1309-37-1	

Right to Know - California State - Proposition 65				
The	The product contains following substance(s) that are considered to be "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 12.01.2023

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.

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Prod-ID 791918

# 16.5 Key / Legend



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5E - indicates a substance that is the subject of a TSCA section 5(e) order 5F - indicates a substance that is the subject of a TSCA section 5(f) rule

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

PMN - indicates a commenced Pre Manufacture Notice substance

RCRA - Resource Conservation and Recovery Act

S - indicates a substance that is identified in a final Significant New Use Rule

SARA - Superfund Amendments and Reauthorization Act

SP - indicates a substance that is identified in a proposed Significant New Use Rule

STEL - Short-term Exposure Limit

STOT - Specific Target Organ Toxicity

T - indicates a substance that is the subject of a final TSCA section 4 test rule or order

TDG - Transportation of Dangerous Goods TLV - Threshold Limit Value

TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule or order

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

XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule