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

· 1.1 Product identifier

· Trade name: ReVeneer Opaker

· Article number: 232220, 232221

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

No further relevant information available.

· Application of the substance / the mixture Masking material

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Schütz Dental GmbH, Dieselstrasse 5-6, D-61191 Rosbach v.d.H. (Germany)

Tel.: +49 (0)6003/814-0 Fax: +49 (0)6003/814-906 www.schuetz-dental.de; e-mail: info@schuetz-dental.de

· Further information obtainable from: Tel.: +49 (0)6003/814-630

· 1.4 Emergency telephone number:

+49 (0) 6003 8140 Schütz Dental (8:00 - 17:00 Uhr) or

+49 (0) 6131 19240 Poison Information Center, University Mainz (24 h)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms





GHS07 GHS09

- · Signal word Warning
- · Hazard-determining components of labelling:

di-urethane dimethacrylate

2-[[(butylamino)carbonyl]oxy]ethyl acrylate

tetramethylene dimethacrylate

 $diphenyl(2,4,6-trimethylbenzoyl)phosphine\ oxide$

· Hazard statements

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P321 Specific treatment (see on this label).

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- · Description: Liquid based on methacryl acid ester, containing an activator.

· Dangerous components:			
CAS: 41137-60-4	di-urethane dimethacrylate	25-50%	
	🕸 Aquatic Chronic 2, H411; 🐠 Skin Sens. 1B, H317		
CAS: 63225-53-6	2-[[(butylamino)carbonyl]oxy]ethyl acrylate	2.5-10%	
	🕸 Aquatic Chronic 2, H411; 🕦 Acute Tox. 4, H332; Skin Sens. 1A, H317		
CAS: 2082-81-7	tetramethylene dimethacrylate	2.5-10%	
EINECS: 218-218-1	🗘 Skin Sens. 1B, H317		
CAS: 75980-60-8	diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide	<2.5%	
	🗞 Repr. 2, H361f; 🎨 Aquatic Chronic 2, H411; 아 Skin Sens. 1B, H317		
CAS: 10373-78-1	dl-bornane-2,3-dione	<2.5%	
	♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335		

[·] Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information Immediately remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment:

No special measures required.

Do not inhale explosion gases or combustion gases.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep people at a distance and stay on the windward side.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- · 7.2 Conditions for safe storage, including any incompatibilities
- ·Storage
- · Requirements to be met by storerooms and receptacles:

Close container immediately after use and protect product from light incidence.

Storage between 10 °C and 25 °C.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures Immediately remove all soiled and contaminated clothing
- · Respiratory protection: Not necessary if room is well-ventilated.
- · Hand protection Protective gloves.
- · Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

· Penetration time of glove material

0.3 mm

Penetration time 60 min.

0,11 mm

Penetration time 10 min.

- · Eye/face protection Safety glasses
- · **Body protection:** Protective work clothing.

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Fluid

• Colour: According to product specification

Odour: Characteristic
 Odour threshold: Not determined.
 Melting point/freezing point: undetermined

· Boiling point or initial boiling point and boiling

range undetermined • Flammability Not applicable.

· Lower and upper explosion limit

Lower: Not determined.
Upper: Not determined.
Flash point: 101 °C
Ignition temperature: >370 °C
Decomposition temperature: Not determined.
pH Not determined.

· Viscosity:

· Kinematic viscosity Not determined. · dynamic: Not determined.

Solubility

· Water: Not miscible or difficult to mix

· Partition coefficient n-octanol/water (log value) Not determined. · Vapour pressure: Not determined.

· Density and/or relative density

Density: Not determined
 Relative density Not determined.
 Vapour density Not determined.

· 9.2 Other information

· Appearance:

· Form: Pasty
· Important information on protection of health and

environment, and on safety.

· Auto-ignition temperature: Product is not selfigniting.

• Explosive properties: Product does not present an explosion hazard.

Void Void

· Solvent content:

· Oxidising liquids

· Oxidising solids

• Organic solvents: 0.0 %

· Change in condition

• Evaporation rate Not determined.

· Information with regard to physical hazard classes

· Explosives Void · Flammable gases Void Void · Aerosols · Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable Void gases in contact with water

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Organic peroxides
 Corrosive to metals
 Desensitised explosives

Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions Exothermic polymerization
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if inhaled.
- · LD/LC50 values relevant for classification:

tetramethylene dimethacrylate LD-50 oral > 5000 mg/kg (rat)

- · Respiratory or skin sensitisation May cause an allergic skin reaction.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

128-37-0 Butylated hydroxytoluene

List II

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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- · Uncleaned packaging:
- · Recommendation:

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Alcohol

14.1 UN number or ID number ADR, IMDG, IATA	UN3082
14.2 UN proper shipping name ADR	3082 ENVIRONMENTALLY HAZARDO SUBSTANCE, LIQUID, N.O.S. (di-uretha dimethacrylate, 2-[[(butylamino)carbonyl]oxy]eth
IMDG	acrylate) ENVIRONMENTALLY HAZARDOUS SUBSTANC LIQUID, N.O.S. (di-urethane dimethacrylate, [[(butylamino)carbonyl]oxy]ethyl acrylate), MARL POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANC LIQUID, N.O.S. (di-urethane dimethacrylate, [[(butylamino)carbonyl]oxy]ethyl acrylate)
14.3 Transport hazard class(es)	
· ADR	
· Class · Label	9 (M6) Miscellaneous dangerous substances and article 9
· IMDG, IATA	
· Class · Label	9 Miscellaneous dangerous substances and articles.9
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant:	No Symbol (fish and tree)
· Special marking (ADR): · Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances a articles.
· Hazard identification number (Kemler code): · EMS Number: · Stowage Category	90 F-A,S-F A
14.7 Maritime transport in bulk according to IM	10

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Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	(-)
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
• •	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOU
<u> </u>	SUBSTANCE, LIQUID, N.O.S. (DI-URETHAN
	DIMETHACRYLATE, 2-[[(BUTYLAMINO)CARBONYI
	OXY]ETHYL ACRYLATE), 9, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category E2 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · National regulations
- · Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H361f Suspected of damaging fertility.
- H411 Toxic to aquatic life with long lasting effects.
- · Department issuing SDS: Schütz Dental GmbH
- · Contact: Dr. U. Krichbaum
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international 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

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Safety data sheet according to 1907/2006/EC, Article 31

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GHS: Globally Harmonised 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 (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

Skin Sens. 1A: Skin sensitisation - Category 1A

Skin Sens. 1B: Skin sensitisation – Category 1B

Repr. 2: Reproductive toxicity – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

* Data compared to the previous version altered.