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

· 1.1 Product identifier

· Trade name: ReVeneer Primer

· Article number: 232211-1

· 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 Dental bonding 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)6003/814-900 www.schuetz-dental.de; e-mail: info@schuetz-dental.de

· Further information obtainable from: F&E, Tel. +49 (0)6003/814-100

· 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

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

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

STOT SE 3 H335 May cause respiratory irritation.

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

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

· Hazard pictograms





GHS02

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

methyl methacrylate

· Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

*P241 Use explosion-proof electrical/ventilating/lighting/equipment.* 

 $P303 + P361 + P353 \ IF \ ON \ SKIN \ (or \ hair): \ Remove/Take \ of fimmediately \ all \ contaminated \ clothing. \ Rinse \ skin \ P303 + P361 + P363 \ IF \ ON \ SKIN \ (or \ hair): \ Remove/Take \ of fimmediately \ all \ contaminated \ clothing.$ 

with water/shower.

*P321* Specific treatment (see on this label).

P405 Store locked up.

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

regulations.

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- · Labelling of packages where the contents do not exceed 125 ml
- · Hazard pictograms





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

methyl methacrylate

· Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label). P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

regulations.

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

### SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 80-62-6	methyl methacrylate		

EINECS: 201-297-1 6 Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335

· Additional information For the wording of the listed risk 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 Take affected persons into fresh air and keep quiet.
- · 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. If symptoms persist, consult a doctor.

· After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- 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.

75-100%

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### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

Foam

Fire-extinguishing powder

Carbon dioxide

- · 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: Wear self-contained respiratory protective device.
- · Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

#### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

- 6.2 Environmental precautions: Prevent seepage into sewage system, workpits and cellars.
- · 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

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 Keep receptacles tightly sealed.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: Storage between 10 °C and 25 °C.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Protect from heat and direct sunlight.
- · 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

#### 80-62-6 methyl methacrylate

OES Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm

(Contd. on page 4)

Trade name: ReVeneer Primer

(Contd. of page 3)

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Respiratory protection:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device when high concentrations are present.

Short term filter device:

Filter A

- · Protection of hands: Solvent resistant gloves
- · Material of gloves Butyl rubber, BR
- · Penetration time of glove material

 $0.1 - 0.2 \, mm$ 

Penetration time: 5 min.
• Eye protection: Safety glasses

· Body protection:

Solvent resistant protective clothing (Only when handling large quantities)

CECTIONO DI	7 7		
SECTION 9: Physical	ana ci	петісаі	properties

· 9.1 Information on t	oasic physical and	chemical properties
· General Information	ı	

· Appearance:

Form: Fluid
Colour: Colourless
Odour: Characteristic
Odour threshold: Not determined.

· pH-value: Not determined

· Change in condition

Melting point/Melting range: -48 °C Boiling point/Boiling range: 101 °C

· Flash point:  $10 \, ^{\circ}C$ 

· Flammability (solid, gaseous) Not applicable.

• Ignition temperature: 430 °C

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour

mixtures are possible.

· Explosion limits:

 Lower:
 2,1 Vol %

 Upper:
 12,5 Vol %

· Vapour pressure at 20 °C: 47 hPa

• **Density at 20 °C:** 0,94 g/cm<sup>3</sup>

• Relative density
• Vapour density

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(Contd. of page 4)

• Evaporation rate Not determined.

· Solubility in / Miscibility with

*Water at 20 °C:* 1,6 g/l

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic: Not determined kinematic: Not determined

· Solvent content:

Organic solvents: 0,0 %

• 9.2 Other information No further relevant information available.

#### 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

Reacts with peroxides and other radical forming substances

Danger of 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 toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

methyl methacrylate LD-50 oral >5000 mg/kg rat (lit.)

LD-50 inhalativ 7093 ppm/4h rat (lit.)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation

May cause an allergic skin reaction.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure

May cause respiratory irritation.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

#### SECTION 12: Ecological information

- · 12.1 Toxicity
- $\cdot \textbf{\textit{Aquatic toxicity:}} \ \textit{No further relevant information available}.$
- · Type of test Effective concentration Method Assessment

Toxicity to fish: LC-50: >79 mg/l OECD 203 (MMA) NOEC: 40 mg/l ISO 7346

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

Printing date 25.02.2016 Version: 6 Revision: 25.02.2016

Trade name: ReVeneer Primer

*Time:* 96 h EEC84

Species:

Oncorhynchus mykiss

Toxicity to Micro- ECO: 100 mg/l starting inhibition

Organisms Species: of cell growth

Pseudomonas putida (MMA)

- · 12.2 Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Components:

methyl methacrylate Biodegradability: 30,7 %

Time:

Method: OECD 301 C

difficult to decompose Valuation:

- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

### 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.

· European waste catalogue

07 01 04\* other organic solvents, washing liquids and mother liquors

- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. 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	
· ADR, IMDG, IATA	UN1247
· 14.2 UN proper shipping name	
$\cdot ADR$	1247 METHYL METHACRYLATE MONOMER
	STABILIZED solution
$\cdot$ IMDG	METHYL METHACRYLATE MONOMER, STABILIZE
	solution
$\cdot$ IATA	Methyl methacrylate monomer, stabilized solution

Trade name: ReVeneer Primer

(Contd. of page 6) · 14.3 Transport hazard class(es)  $\cdot ADR$ · Class 3 (F1) Flammable liquids. ·Label · IMDG, IATA · Class 3 Flammable liquids. · Label · 14.4 Packing group II · ADR, IMDG, IATA · 14.5 Environmental hazards: · Marine pollutant: No Warning: Flammable liquids. · 14.6 Special precautions for user · Danger code (Kemler): 339 · EMS Number: F-E,S-D· Stowage Category · Stowage Code SW2 Clear of living quarters. · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. · Transport/Additional information:  $\cdot ADR$ · Limited quantities (LQ) 1L· Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml · Transport category D/E· Tunnel restriction code · Limited quantities (LQ) 1L· Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml UN 1247 METHYL METHACRYLATE MONOMER, · UN "Model Regulation": STABILIZED SOLUTION, 3, II

#### **SECTION 15: Regulatory information**

- $\cdot$  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 P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

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Trade name: ReVeneer Primer

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- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · National regulations
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

· Technical instructions (air):

Class	Share in %
NK	75-100

· 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

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

#### · Department issuing MSDS: F & E

· 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 européen sur le transport 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

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

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

\* Data compared to the previous version altered.

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