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

· 1.1 Product identifier

· Trade name: Relight, Versiegelungslack

· Article number: 689121-1

· 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.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful 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 CLP regulation.

· Hazard pictograms





GHS02

GHS07

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

methyl methacrylate

2-Propensäure, Reaktionsprodukte mit Dipentaerythritol

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

· Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

· 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 off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P405 Store locked up.

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

regulations.

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

· Hazard pictograms





GHS02

GHS07

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

methyl methacrylate

2-Propensäure, Reaktionsprodukte mit Dipentaerythritol

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

· Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

· 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: Liquid based on methacryl acid ester.

· Dangerous components:			
	methyl methacrylate	50-75%	
	🏇 Flam. Liq. 2, H225; 🚺 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335		
CAS: 1384855-91-7	2-Propensäure, Reaktionsprodukte mit Dipentaerythritol	10-25%	
	2-Propensäure, Reaktionsprodukte mit Dipentaerythritol \$\foating\$ Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412		
	diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide	< 2.5%	
EINECS: 278-355-8	Repr. 2, H361f; 🔖 Aquatic Chronic 2, H411; 아 Skin Sens. 1B, H317		

· 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 Supply fresh air; consult doctor in case of complaints.
- · After skin contact

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

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

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- · After swallowing 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.

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

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

Carbon dioxide

Fire-extinguishing powder

Foam

Water haze

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- · 5.2 Special hazards arising from the substance or mixture

Danger of polymerization.

Can form explosive gas-air mixtures.

- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.
- · Additional information

Cool endangered receptacles with water spray.

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

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

#### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Avoid eye and skin contact with the substance.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

· 6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Prevent seepage into sewage system, workpits and cellars.

Do not allow to enter sewers/surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

When pumping out, please ensure grounding.

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

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 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

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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(Contd. of page 3)

- · 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: Store away from foodstuffs.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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

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

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

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

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.

- $\cdot \textit{Eye protection:} \ Tightly \ sealed \ goggles.$
- · Body protection:

Protective work clothing.

(Only when handling large quantities)

#### SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid
Colour: Colourless

Odour: Characteristic

Odour threshold: Not determined.

· pH-value: Not determined

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	(Contd. of page
Change in condition	
Melting point/Melting range:	-48 °C
Boiling point/Boiling range:	101 °C
Flash point:	10 °C
Flammability (solid, gaseous)	Not applicable.
Ignition temperature:	<i>430 °C</i>
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapou
3 7 1	mixtures are possible.
Explosion limits:	
Lower:	2.1 Vol %
Upper:	12.5 Vol %
Vapour pressure at 20 °C:	47 hPa
Density:	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Slightly soluble
Partition coefficient (n-octanol/wat	ter): 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
- · 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: -

#### SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity
- · 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 Irritant to skin and mucous membranes.

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- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation Sensitisation possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Irritant

- · 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
- · Aquatic toxicity: 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
Time: 96 h EEC84
Species:
Oncorhynchus mykiss

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

Organisms Species: of cell growth

(MMA) Pseudomonas putida

*Toxicity to fish:* 

(THF-2-MA) LC-50/96h: 34,7 mg/l Species: Pimephales promelas

Method: flow (lit.)

- · 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.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

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

· European waste catalogue

08 01 11\* waste paint and varnish containing organic solvents or other dangerous substances

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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.

14.1 UN-Number ADR, IMDG, IATA	UN1247
14.2 UN proper shipping name ADR IMDG, IATA	1247 METHYL METHACRYLATE MONOMI STABILIZED mixture METHYL METHACRYLATE MONOMER, STABILIZ
	mixture
14.3 Transport hazard class(es)	
ADR	
Class	3 (F1) Flammable liquids.
Label	3 (F1) Frammable liquids. 3
IMDG, IATA	
Class Label	3 Flammable liquids. 3
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler): EMS Number:	339 F-E,S-D
14.7 Transport in bulk according to Anne MARPOL73/78 and the IBC Code	ex 11 of Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml
Transport category Tunnel restriction code	Maximum net quantity per outer packaging: 500 ml 2 D/E
IMDG Limited quantities (LQ)	1L

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· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN ''Model Regulation'':	UN1247, METHYL METHACRYLATE MONOMER, STABILIZED mixture, 3, II

### 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.
- · National regulations
- · Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed.

- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly 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

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

- · 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)

ICAO: International Civil Aviation Organisation

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

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

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

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

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

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

Repr. 2: Reproductive toxicity, Hazard Category 2

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

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

\* \* Data compared to the previous version altered.