

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.11.2013

Version: 13

Revision: 27.11.2013

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

- **Product identifier**
- **Trade name:** Temdent Classic, Flüssigkeit
- **Article number:** 220020-1
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** see point 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
- **Emergency telephone number:** +49 (0)6003/814-0 (8:00-17:00 h)

2 Hazards identification

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



GHS02 flame

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



GHS07

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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R37/38: Irritating to respiratory system and skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



F; Highly flammable

R11: Highly flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **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

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· 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***P101 If medical advice is needed, have product container or label at hand.**P102 Keep out of reach of children.**P103 Read label before use.**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.**P321 Specific treatment (see on this label).**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures**· Description:***Liquid based on methacryl acid ester, containing an activator, used for the production of temporary crowns and bridges in dental medicine.***· Dangerous components:**

CAS: 80-62-6 EINECS: 201-297-1	methyl methacrylate <div style="display: flex; align-items: center;"> ☒ Xi R37/38; ☒ Xi R43; ☒ F R11 </div> <div style="border-top: 1px dashed black; padding-top: 2px;"> ☒ Flam. Liq. 2, H225; ☒ Skin Irrit. 2, H315; ☒ Skin Sens. 1, H317; STOT SE 3, H335 </div>	50-75%
	Tetrahydrofurfuryl-2-methacrylat <div style="display: flex; align-items: center;"> ☒ Xi R36/37/38 </div> <div style="border-top: 1px dashed black; padding-top: 2px;"> ☒ Skin Irrit. 2, H315; ☒ Eye Irrit. 2, H319; STOT SE 3, H335 </div>	2.5-10%

· Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures**· After inhalation***Supply fresh air and to be sure call for a doctor.**In case of unconsciousness place patient stably in side position for transportation.***· 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.**· After swallowing** Call a doctor immediately.**· Information for doctor****· Most important symptoms and effects, both acute and delayed** No further relevant information available.**· Indication of any immediate medical attention and special treatment needed***No further relevant information available.*

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5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
Carbon dioxide
Fire-extinguishing powder
Foam
Water spray
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose of the material collected according to regulations.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **Reference to other sections** See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Keep receptacles tightly sealed.
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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 exposure to the light.
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Storage class** Not determined
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

- 80-62-6 methyl methacrylate**

WEL	Short-term value: 416 mg/m ³ , 100 ppm
	Long-term value: 208 mg/m ³ , 50 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **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 when high concentrations are present.

- **Protection of hands:** Protective gloves.

- **Material of gloves:** Butyl rubber, BR

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Tightly sealed goggles.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Fluid

Colour: Clear

· **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 °C (DIN 51755)

· **Flammability (solid, gaseous)** Not applicable.

· **Ignition temperature:** 430 °C (DIN 51794)

· **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 % (Literatur)

Upper: 12.5 Vol % (Literatur)

· **Vapour pressure at 20 °C:** 47 hPa

· **Density at 20 °C:** 0.967 g/cm³

· **Relative density** Not determined.

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· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
· Solvent content:	
Organic solvents:	0.0 %
· Other information	---

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Exothermic polymerization
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.
- **Hazardous decomposition products:** -

11 Toxicological information

- **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.)
Tetrahydrofurylmethacrylat LD-50 oral 4000 mg/kg rat (lit.)
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization 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

12 Ecological information

- **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

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(MMA) *Pseudomonas putida*· **Persistence and degradability** No further relevant information available.· **Behaviour in environmental systems:**· **Components:**

methyl methacrylate Biodegradability: 30,7 %

Time: 28 d

Method: OECD 301 C

Valuation: difficult to decompose

· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **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.

· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **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**

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

· **Uncleaned packaging:**· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**· **ADR, IMDG, IATA**

UN1247

· **UN proper shipping name**· **ADR**

1247 METHYL METHACRYLATE MONOMER, STABILIZED, mixture

· **IMDG, IATA**

METHYL METHACRYLATE MONOMER, STABILIZED, mixture

· **Transport hazard class(es)**· **ADR**· **Class**

3 (F1) Flammable liquids.

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· **Label** 3· **IMDG, IATA**· **Class** 3 Flammable liquids.· **Label** 3· **Packing group**· **ADR, IMDG, IATA** II· **Environmental hazards:**· **Marine pollutant:** No· **Special precautions for user** Warning: Flammable liquids.· **Danger code (Kemler):** 339· **EMS Number:** F-E,S-D· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)** 1L· **Transport category** 2· **Tunnel restriction code** D/E· **UN "Model Regulation":** UN1247, METHYL METHACRYLATE MONOMER, STABILIZED, mixture, 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **National regulations**· **Technical instructions (air):**

Class	Share in %
NK	50-75

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

R11 Highly flammable.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37/38 Irritating to respiratory system and skin.

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R43 May cause sensitisation by skin contact.

· **Department issuing MSDS:** 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 Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (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 Harmonized 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

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

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