Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

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

· 1.1 Product identifier

· Trade name: Futura Self Flüssigkeit

· Article number: 650661, 650662

· 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 self curing resin

· 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)6003/814-0

· 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.

Acute Tox. 4 H302 Harmful if swallowed.

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 GB CLP regulation.

· Hazard pictograms





GHS02

GHS07

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

methyl methacrylate

tetramethylene dimethacrylate

· Hazard statements

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

P405 Store locked up.

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

regulations.

(Contd. on page 2)

Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

(Contd. of page 1)

- · 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: 80-62-6	methyl methacrylate	75-100%	
EINECS: 201-297-1	🌣 Flam. Liq. 2, H225; 🔱 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335		
	tetramethylene dimethacrylate	2.5-10%	
EINECS: 218-218-1	💠 Skin Sens. 1B, H317		

[·] 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 and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· 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 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

Fire-extinguishing powder

Carbon dioxide

Foam

Water haze

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- 5.2 Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.
- · 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.

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

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Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

(Contd. of page 2)

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

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 enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Send for recovery or disposal in suitable receptacles.

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.

Ensure good ventilation/exhaustion at the workplace.

 $\cdot \textbf{ Information about fire-and explosion protection:}$

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: 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

- · 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
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as 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.

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(Contd. on page 4)

(Contd. of page 3)

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

Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

· Hand protection Solvent resistant 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:

Solvent resistant protective clothing (Only when handling large quantities)

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Ddour threshold:
Fluid
Colourless
Ester-like
Not determined.

• Melting point/freezing point: -48 ° C

· Boiling point or initial boiling point and boiling

range 101 °C

· Flammability Not applicable.

· Lower and upper explosion limit

 · Lower:
 2.1 Vol %

 · Upper:
 12.5 Vol %

 · Flash point:
 10 °C

 · Ignition temperature:
 430 °C

• Decomposition temperature: Not determined. • pH Not determined

· Viscosity:

· Kinematic viscosity
· dynamic:

Not determined
Not determined

·Solubility

· Water: Not miscible or difficult to mix

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

· Vapour pressure at 20 °C: 47 hPa

· Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Not determined.
 Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health and

environment, and on safety.

· Auto-ignition temperature: Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Solvent content:

· Solids content: 0.0 %

· Change in condition

· Evaporation rate Not determined.

(Contd. on page 5)

Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

(Contd. of page 4

	(Contd. of page 4)			
· Information with regard to physical hazard classe	s			
· Explosives	Void			
· Flammable gases	Void			
· Aerosols	Void			
· Oxidising gases	Void			
· Gases under pressure	Void			
· Flammable liquids	Highly flammable liquid and vapour.			
· 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				
gases in contact with water	Void			
· Oxidising liquids	Void			
· Oxidising solids	Void			
· Organic peroxides	Void			
· Corrosive to metals	Void			
· 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 swallowed.
- LD/LC50 values relevant for classification:

 $methyl \ methacrylate \qquad LD\text{-}50 \ oral \qquad >5000 \ mg/kg \ rat \ (lit.)$

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

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

Oral LD50 1,200 mg/kg (rat)

- · Skin corrosion/irritation Causes skin irritation.
- · Respiratory or skin sensitisation May cause an allergic skin reaction.
- · STOT-single exposure May cause respiratory irritation.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.

(Contd. on page 6)

(Contd. of page 5)

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

Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

· 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

- · 12.2 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

- · 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 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.

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.

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

SECTION 14: Transport information			
· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1247		
· 14.2 UN proper shipping name			
· ADR	1247 METHYL METHACRYLATE MONOME.		
· IMDG, IATA	STABILIZED mixture METHYL METHACRYLATE MONOMER, STABILIZE mixture		

(Contd. on page 7)

Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

(Contd. of page 6) · 14.3 Transport hazard class(es) $\cdot ADR$ 3 (F1) Flammable liquids. · Class ·Label · IMDG, IATA 3 Flammable liquids. · Class · Label 3 · 14.4 Packing group II· ADR, IMDG, IATA · 14.5 Environmental hazards: · Marine pollutant: No · 14.6 Special precautions for user Warning: Flammable liquids. · Hazard identification number (Kemler code): 33 F-E,S-D· EMS Number: · Stowage Category · Stowage Code SW2 Clear of living quarters. · 14.7 Maritime transport in bulk according to IMO instruments Not applicable. · Transport/Additional information: $\cdot ADR$ · Limited quantities (LQ) Code: E2 · Excepted quantities (EQ) Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml · Transport category D/E· Tunnel restriction code 1L· Limited quantities (LQ) · 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 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.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

(Contd. on page 8)

Printing date 05.05.2022 Version: 14 (replaces version 13) Revision: 05.05.2022

Trade name: Futura Self Flüssigkeit

(Contd. of page 7)

- 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 %
III	2.5-10

- · 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.

H335 May cause respiratory irritation.

· Department issuing SDS:

F & E

Schütz Dental GmbH

· Contact: Advisory service dep.

· 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 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

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 - Category 2

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.

GB