according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 1 of 10

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

1.1. Product identifier

FuturaGen LF Flüssigkeit

Further trade names

Art.-Nr.: 650964, 650965

UFI: VN10-S0X4-G00D-D500

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

Use of the substance/mixture

Denture base material

1.3. Details of the supplier of the safety data sheet

Company name: Schütz Dental GmbH Street: Dieselstrasse 5-6

Place: D-61191 Rosbach (Germany)

Telephone: +49 (0) 6003 814-0 Telefax: +49 (0) 6003 814-906

E-mail: info@schuetz-dental.de

Contact person: Dr. Uwe Krichbaum Telephone: +49 (0) 6003 814-650

Internet: www.schuetz-dental.de
Responsible Department: Technische Dokumentation

<u>1.4. Emergency telephone</u> +49 (0) 6003 814-0 Schütz Dental (8:00 - 17:00 Uhr) or +49 (0) 6131 19240

number: University Mainz (24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

methyl methacrylate
2-ethylhexyl methacrylate
tetramethylene dimethacrylate
Signal word:
Danger

Pictograms:





Hazard statements

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.

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 2 of 10

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 waste according to applicable legislation.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:





Hazard statements

H317

Precautionary statements

P261-P501

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

| n (GB CLP Regulation) acrylate | Index No | REACH No | |
|---|--|---|--|
| | | | |
| acrylate | | | |
| | | | 50 - < 75 % |
| | 607-035-00-6 | | |
| , Skin Irrit. 2, Skin Sens | . 1, STOT SE 3; H225 H315 H317 H3 | 335 | |
| 2-ethylhexyl methacrylate | | | 10 - < 25 % |
| | 607-134-00-4 | | |
| Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H315 H319 H317 H335 H412 | | | |
| tetramethylene dimethacrylate | | 2.5 - < 10 % | |
| | 607-134-00-4 | | |
| 1B; H317 | | | |
| | methacrylate Eye Irrit. 2, Skin Sens. | , Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H3 methacrylate 607-134-00-4 Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H3 ene dimethacrylate 607-134-00-4 | Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335 methacrylate 607-134-00-4 Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H315 H319 H317 H335 ene dimethacrylate 607-134-00-4 |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|---------|--|---------------------|-------------|
| | Specific Conc. Limits, M-factors and ATE | | |
| 80-62-6 | 201-297-1 | methyl methacrylate | 50 - < 75 % |
| | oral: LD50 = 7.872 mg/kg mg/kg | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

Safety Data Sheet

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 3 of 10

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 4 of 10

Advice on safe handling

Provide adequate ventilation.

Advice on protection against fire and explosion

 $\label{thm:continuous} \mbox{Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.}$

Vapours can form explosive mixtures with air.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Recommended storage temperature 10 - 25 °C

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Denture base material

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|---------|---------------------|-----|-------|-----------|---------------|--------|
| 80-62-6 | Methyl methacrylate | 50 | 208 | | TWA (8 h) WE | |
| | | 100 | 416 | | STEL (15 min) | WEL |

8.2. Exposure controls











Print date: 12.03.2025

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

Tested protective gloves must be worn

Suitable material:

Butyl caoutchouc (butyl rubber)

NBR (Nitrile rubber)

Permeation time (maximum wear duration): 0,3 mm: 60 min. Permeation time (maximum wear duration): 0,11 mm: 10 min.

Skin protection

Protective clothing.

Respiratory protection

Usually no personal respirative protection necessary.

Respiratory protection necessary at: high concentrations

Filter type: A

Safety Data Sheet

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 5 of 10

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: colourless

Melting point/freezing point:

Boiling point or initial boiling point and

not determined

101 °C

boiling range:

Flammability: not determined Lower explosion limits: 2.1 vol. % Upper explosion limits: 12,5 vol. % Flash point: 10 °C Auto-ignition temperature: 430 °C Decomposition temperature: not determined pH-Value: not determined Viscosity / kinematic: not determined Water solubility: No

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 47 hPa

(at 20 °C)

Density (at 20 °C): 0,93 g/cm³
Relative vapour density: not determined
Particle characteristics: not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Hazardous polymerisation:

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

Safety Data Sheet

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 6 of 10

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Chemical name | | | | |
|---------|---------------------|---------------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 80-62-6 | methyl methacrylate | | | | |
| | oral | LD50 7.872 mg/kg mg/kg | | | |

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (methyl methacrylate; 2-ethylhexyl methacrylate; tetramethylene dimethacrylate)

Carcinogenic/mutagenic/toxic effects 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. (methyl methacrylate; 2-ethylhexyl methacrylate)

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.

11.2. Information on other hazards

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 7 of 10

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Send to a hazardous waste incinerator facility under observation of official regulations.

List of Wastes Code - residues/unused products

070104 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation,

supply and use (MFSU) of basic organic chemicals; other organic solvents, washing liquids and

mother liquors; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1247

14.2. UN proper shipping name: 1247 METHYLMETHACRYLAT, MONOMER, STABILISIERT, Gemisch

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code: F1
Limited quantity: 1L
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Other applicable information (land transport)

E2

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1247

14.2. UN proper shipping name: 1247 METHYLMETHACRYLAT, MONOMER, STABILISIERT, Gemisch

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code: F1
Limited quantity: 1L

Other applicable information (inland waterways transport)

E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 1247

14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED mixture

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 8 of 10

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Marine pollutant: Nein EmS: F-E,S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1247

14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED mixture

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Information according to Directive P5c FLAMMABLE LIQUIDS

2012/18/EU (SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1.

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 9 of 10

Abbreviations and acronyms

Flam. Liq: Flammable liquids Skin Irrit: Skin irritation Eye Irrit: Eye irritation Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure

Aquatic Chronic: Chronic aquatic hazard CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

EC/EEC: European Community/European Economic Community

EU: European Union

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50% LD50: Lethal dose, 50%

LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

M-factor: Multiplying factor

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association DGR: Dangerous Goods Regulations

ICAO: International Civil Aviation Organization

TI: Technical Instructions

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to GB CLP Regulation

| - control cont | | |
|--|--------------------------|--|
| Classification | Classification procedure | |
| Flam. Liq. 2; H225 | On basis of test data | |
| Skin Irrit. 2; H315 | Calculation method | |
| Eye Irrit. 2; H319 | Calculation method | |
| Skin Sens. 1; H317 | Calculation method | |
| STOT SE 3; H335 | Calculation method | |

Safety Data Sheet

according to UK REACH Regulation

FuturaGen LF Flüssigkeit

Revision date: 12.03.2025 Product code: 650964 Page 10 of 10

Relevant H and EUH statements (number and full text)

| 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.

H412 Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)