

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

1.1. Product identifier

L-1

CAS No.: -
EC No.: -
INDEX No.: -
REACH No.: -

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

Relevant identified uses: Manufacture.
Uses advised against: Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Manufacturer

pro3dure medical GmbH

Am Burgberg 13
D 58642 Iserlohn

Telephone +49 (0)2374 920050-10

Telefax: +49 (0)2374 920050-50

Supplier

pro3dure medical GmbH

Am Burgberg 13
D 58642 Iserlohn

Telephone +49 (0)2374 920050-10

Telefax: +49 (0)2374 920050-50

Information contact

pro3dure GmbH

Information telephone +49 (0)2374 920050-10
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E-mail (competent person) info@pro3dure.com
Website www.pro3dure.com

1.4. Emergency telephone number

This number is serviced during office hours.

Telephone +49 (0)2374 920050-10

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:

Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1/1A/1B, H317; Repr. 2, H361; STOT SE 3, H335;
Aquatic Chronic 3, H412

2.2. Label elements

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



GHS02, GHS07
Danger

Signal word:

Hazard statements:

- H227 Combustible liquid.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H361 Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash with water&soap thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+352 IF ON SKIN: Wash with plenty of water/soap.
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor.
P312 Call a POISON CENTER/doctor/if you feel unwell.
P321 Specific treatment (see .? on this label).
P332+313 If skin irritation occurs: Get medical advice/attention.
P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P362+364 Take off contaminated clothing and wash it before reuse.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to .?.

Hazardous component(s) for labelling:

Special labelling of particular preparations:

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2.3. Other hazards

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SECTION 3: Composition / information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

-

Composition/information on ingredients

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxane-5,12-diazahexadecane-1,16-diyl bismethacrylate	276-957-5	72869-86-4			< 50 %	Skin Sens. 1/1A/1B, H317
Diphenyl-(2,4,6-trimethylbenzoyl)phosphinoxid	278-355-8	75980-60-8			< 5 %	Repr. 2, H361
Methacrylic acid methylester	201-297-1	80-62-6	607-035-00-6		< 45 %	-
2-Propenoic acid, reaction products with pentaerythritol	629-850-6	1245638-61-2			< 15 %	-
Drometrizole	219-470-5	2440-22-4			< 0.1 %	-

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Take off immediately all contaminated clothing. When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

In case of inhalation: Provide fresh air.

Following skin contact: Wash immediately with: Water and soap

After eye contact: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion: Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

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

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry extinguishing powder Dry sand

Unsuitable extinguishing media Excess water

5.2. Special hazards arising from the substance or mixture

In case of fire: Wear self-contained breathing apparatus. Co-ordinate fire-fighting measures to the fire surroundings.

5.3. Advice for firefighters

General information

In case of fire and/or explosion do not breathe fumes. Co-ordinate fire-fighting measures to the fire surroundings.

Special protective equipment for fire-fighters:

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: Sand Kieselguhr Universal binder Sawdust

6.4. Reference to other sections

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

All work processes must always be designed so that the following is excluded: Inhalation All work processes must always be designed so that the following is excluded: Inhalation

Precautions against fire and explosion:

Always close containers tightly after the removal of product. Use only in well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use the material in places where open light, fire and other flammable sources can be kept away. Use only in well-ventilated areas.

Hints on joint storage

Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit value

Substance:	CAS-No.:		Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m ³]	Limitation of exposure peaks:	Remark:

Substance with a common (EC) occupational exposure limit value.

Substance:	CAS-No.:		Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m ³]	Limitation of exposure peaks:	Remark:

DNEL-/PNEC-values

DNEL value

Substance:	CAS-No.:	DNEL/DMEL
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	worker inhalative xxx(systemisch) 3,3 mg/m ³ worker dermal xxx(systemisch) 1,3 xxx(mg/kg bw /24h) xxx(Verbraucher) inhalative xxx(systemisch) 0,6 mg/m ³ xxx(Verbraucher) dermal xxx(systemisch) 0,7 xxx(mg/kg bw/24h) xxx(Verbraucher) xxx(systemisch) 0,3 xxx(mg/kg bw/24h)

PNEC Value

Substance:	CAS-No.:	PNEC
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	xxx(Süßwasser) 0,01 mg/l xxx(Meerwasser) 0,001 mg/l xxx(Kläranlagen) 3,61 mg/l xxx(Süßwassersediment) 4,56 xxx(mg/kg Sediment) xxx(Meeressediment) 0,46 xxx(mg/kg Sediment) soil 0,91 xxx(mg/kg Boden)
2-Propenoic acid, reaction products with pentaerythritol	1245638-61-2	xxx(Kläranlagen) 10 mg/l xxx(Meeressediment) 15,1 µg/l xxx(Meerwasser) 320 xxx(ng/l) xxx(Süßwasser) 3,2 µg/l xxx(Süßwassersediment) 151 µg/l

Additional information

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8.2. Exposure controls**Occupational exposure controls:**

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General protection and hygiene measures:

-

Personal protection equipment

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Respiratory protection

Respiratory protection

Hand protection

NBR (Nitrile rubber)

Eye/face protection

Eye glasses with side protection

Body protection:

Lab coat

Environmental exposure controls

-

Consumer exposure controls

-

Exposure Scenario:

-

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance****Physical state:**

Liquid

Colour:

Various

Odour:

Odour threshold:

Safety relevant basis data

Parameter	Value	Unit	Remark
pH:			No data available
Melting point/freezing point:			No data available
Initial boiling point and boiling range:	101	°C	
Flash point:	10	°C	
Evaporation rate:			No data available
Flammability (solid, gas):			No data available
Explosivity:			No data available
Upper flammability or explosive limits:			No data available
Lower flammability or explosive limits:			No data available
Vapour pressure:			No data available
Vapour density:			No data available
Relative density:			No data available
Density:	1,1	g/cm ³	
Soluble (g/L) in:			No data available
Water solubility (g/L):			No data available
Fat solubility (g/L):			No data available
Partition coefficient: n-octanol/water:			No data available
Ignition temperature:			No data available
Decomposition temperature:			No data available
Viscosity:			No data available
Oxidizing properties:			No data available

9.2. Other information

None

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours may form explosive mixtures with air.

10.2. Chemical stability

Decomposition with: UV-radiation/sunlight. Heat. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

10.3. Possibility of hazardous reactions

-

10.4. Conditions to avoid

Heat. UV-radiation/sunlight.

10.5. Incompatible materials

Can polymerise exothermically if heated, exposed to air, sunlight or by addition of free radical initiators.

10.6. Hazardous decomposition products

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

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M-factor: - **Acute toxicity (dermal):** -
Acute toxicity (oral): - **Acute toxicity (inhalative):** -

Acute toxicity

Substance:	CAS-No.:	Toxicological information
2-Propenoic acid, reaction products with pentaerythritol	1245638-61-2	LD50 oral (rat) 420 mg/kg
xxxx(Drometrizole)	2440-22-4	
xxxx(Diphenyl-(2,4,6-trimethylbenzoyl)phosphinoxid)	75980-60-8	
xxxx(Methacrylsäuremethylester)	80-62-6	
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	LD50 oral (rat) > 5000 mg/kg

Skin corrosion/irritation:

Irritant.

Serious eye damage/irritation:

Harmful if swallowed

Respiratory or skin sensitisation:

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity:

-

Germ cell mutagenicity:

-

Reproductive toxicity:

-

STOT-single exposure:

-

STOT-repeated exposure:

-

Aspiration hazard:

Harmful if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

-

Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
2-Propenoic acid, reaction products with pentaerythritol	1245638-61-2	LC50 (fish, 96 h) 3,2 mg/l LC50 (crustaceans, 48h) 13 mg/l EC50 (algae, 96 h) 33 mg/l
xxxx(Drometrizole)	2440-22-4	
xxxx(Diphenyl-(2,4,6-trimethylbenzoyl)phosphinoxid)	75980-60-8	
xxxx(Methacrylsäuremethylester)	80-62-6	
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	XXX > 1,2 mg/l XXX > 0,68 mg/l

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

There are no data available on the mixture itself.

12.6. Other adverse effects

There are no data available on the mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product:

Dispose of waste according to applicable legislation.

Appropriate disposal / Package

-

List of proposed waste codes / waste designations according to EWC / AVV

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste key product: -

Waste key packaging: -

SECTION 14: Transport information

14.1. UN number

UN No.: 1247

14.2. UN proper shipping name

Land transport (ADR/RID)

METHYLMETHACRYLAT, MONOMER, STABILISIERT

Methylmethacrylat, monomer, stabilisiert

Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

METHYL METHACRYLATE MONO- MER, STABILIZED

Methyl methacrylate, monomer, stabilized

14.3. Transport hazard class(es)

Hazard label(s) / Label:

Classification code: / Classification
Code:

F1

14.4. Packing group

Packing group/ Packing Group:

14.5. Environmental hazards

ADR/RID / IMDG / ICAO-TI / IATA-DGR:
Marine pollutant:

Yes

No

14.6. Special precautions for user

Land transport (ADR/RID)

Transport category: 2
Special provisions:

Tunnel restriction code:
Limited quantity (LQ): 4

Sea transport (IMDG)

EmS-No:

Special provisions: Limited quantity (LQ): 4

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remark -

SECTION 15: Regulatory information

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

EU legislation

Information on Regulation (EC) No 166/2006 establishing a European Pollutant Release and Transfer Register:
-

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer:
-

Regulation (EC) No. 648/2004 (Detergents regulation)
-

Regulation (EC) No 850/2004 [POP-Regulation]:
-

Regulation (EU) No 649/2012 on the export and import of dangerous chemicals:
-

Use restriction according to REACH annex XVII, no.:
-

National regulations

Observe in addition any national regulations!

Restrictions of occupation
-

Other regulations, restrictions and prohibition regulations
-

15.2. Chemical Safety Assessment

For this preparation a chemical safety assessment has been carried out. -
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SECTION 16: Other information

Relevant H- and EUH-phrases (Number and full text):

Hazard statements

H227	Combustible liquid.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage..
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Training advice

-

Recommended restrictions of use:

-

Further remarks:

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Documentation of changes:

-

Key literature references and sources for data

-

Abbreviations and acronyms

None