

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

1.1. Product identifier

printodent[®] GR-17.1 temporary It

UV curable resin

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 GmbH

Am Burgberg 13
D 58642 Iserlohn

Telephone +49 (0)2374 920050-0
Telefax: +49 (0)2374 920050-50

Supplier
pro3dure GmbH

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pro3dure GmbH

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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 920050-0

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; STOT SE 3, H335; Aquatic Chronic 3, H412

2.2. Label elements

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

Hazard pictograms



Signal word: GHS07
Danger

Hazard statements:

- H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash with soap and water 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/shower.
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.
P310 Immediately call a POISON CENTER/doctor.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see information on 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 according to official regulations.

Hazardous component(s) for labelling:

-

Special labelling of particular preparations:

-

2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition / information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Mixture related information

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-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate	276-957-5	72869-86-4		01-2120751202-68-0000	20 - 50 %	Skin Sens. 1/1A/1B, H317
3,6,9-trioxaundecamethylene dimethacrylate	203-653-1	109-17-1		01-2120762746-43-0000	10 - 25 %	-
Silicon dioxide	231-545-4	7631-86-9		01-2119379499-16-0000	< 50 %	-
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	423-340-5	162881-26-7		01-2119489401-38-0000	< 2 %	-

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.

In case of inhalation: No special measures are necessary. Seek medical attention if problems persist.

Following skin contact: After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician. Change contaminated, saturated clothing.

After eye contact: No special measures are necessary. Seek medical attention if problems persist.

After ingestion: No special measures are necessary. Seek medical attention if problems persist.

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

No known symptoms to date.

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

Provide fresh air. Treat symptomatically. First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry extinguishing powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Foam

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Water mist Carbon monoxide Carbon dioxide (CO₂)

5.3. Advice for firefighters

General information

Move undamaged containers from immediate hazard area if it can be done safely. Coordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers.

Special protective equipment for fire-fighters:

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety. Provide adequate ventilation.
Keep away from unprotected people. Keep upwind. Remove all sources of ignition.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. 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

Advices on safe handling

Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray.
Keep away from sources of ignition - No smoking.

Precautions against fire and explosion:

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and in a well-ventilated place. Protect against direct sunlight.

Hints on joint storage

Do not store together with: Oxidizing agent

7.3. Specific end use(s)

Observe instructions for use.

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 (systemic) 3,3 mg/m ³ worker dermal (systemic) 1,3 (mg/kg bw /24h) consumer inhalative (systemic) 0,6 mg/m ³ consumer dermal (systemic) 0,7 (mg/kg bw/24h) consumer (systemic) 0,3 (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	(fresh water) 0,01 mg/l (sea water) 0,001 mg/l (sewage treatment plants) 3,61 mg/l (freshwater sediment) 4,56 (mg/kg sediment) (marine sediment) 0,46 (mg/kg sediment) soil 0,91 (mg/kg soil)

Additional information

none

8.2. Exposure controls

Occupational exposure controls:

Provide adequate ventilation as well as local exhaust at critical locations. Technical measures and the application of suitable work processes have priority over personal protection equipment.

General protection and hygiene measures:

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

Personal protection equipment

Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Hand protection

Tested protective gloves are to be worn: DIN EN 374 Suitable material: Butyl caoutchouc (butyl rubber)

Eye/face protection

Tightly sealed safety glasses.

Body protection:

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Only wear fitting, comfortable and clean protective clothing. Barrier creams are not substitutes for body protection.

Environmental exposure controls

Refer to chapter 7. No further action is necessary.

Consumer exposure controls

Refer to chapter 7. No further action is necessary.

Exposure Scenario:

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: liquid
Colour: various
Odour: characteristic

Odour threshold: no data available

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:			no data available
Flash point:			no data available
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:	1,2-1,4	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:	1,5 - 3	Pas	
Oxidizing properties:			no data available

9.2. Other information

-

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Polymerisation

10.4. Conditions to avoid

No special measures are necessary. Seek medical attention if problems persist. Humidity

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Pyrolysis products, toxic. Carbon dioxide Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

There are no data available on the preparation/mixture itself.

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

Acute toxicity

Substance:	CAS-No.:	Toxicological information
3,6,9-trioxaundecamethylene dimethacrylate	109-17-1	LD50 dermal (rabbit) > 3000 mg/kg
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
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	162881-26-7	
Silicon dioxide	7631-86-9	

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation:

No data available.

Respiratory or skin sensitisation:

May cause sensitisation especially in sensitive humans.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity:

There are no data available on the preparation/mixture itself. No indication of human carcinogenicity.
Bridging principle "Dilution".

Germ cell mutagenicity:

There are no data available on the preparation/mixture itself. No indications of human germ cell mutagenicity exist. Bridging principle "Dilution".

Reproductive toxicity:

There are no data available on the preparation/mixture itself. No indications of human reproductive toxicity exist. Bridging principle "Dilution".

STOT-single exposure:

There are no data available on the preparation/mixture itself.

STOT-repeated exposure:

There are no data available on the preparation/mixture itself.

Aspiration hazard:

No data available.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the preparation/mixture itself.

Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
3,6,9-trioxaundecamethylene dimethacrylate	109-17-1	
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	> 1,2 mg/l > 0,68 mg/l
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	162881-26-7	LC50 (fish, 96 h) 0,09 mg/l LC50 (crustaceans, 48h) 1,175 mg/l EC50 (algae, 96 h) 0,26 mg/l
Silicon dioxide	7631-86-9	

12.2. Persistence and degradability

There are no data available on the preparation/mixture itself.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product:

-

Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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

-

Waste key product: 08 04 09

Waste key packaging: 15 01 10

SECTION 14: Transport information

14.1. UN number

UN No.: -

14.2. UN proper shipping name

Land transport (ADR/RID)

-

-

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

-

-

14.3. Transport hazard class(es)

Hazard label(s) / Label: - Classification code: / Classification Code: -

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: -

Special provisions: -

Tunnel restriction code: -

Limited quantity (LQ): -

Sea transport (IMDG)

EmS-No: -

Special provisions: - Limited quantity (LQ): -

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

Remark None

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:

Not relevant

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

Not relevant

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

Not relevant

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

Not relevant

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

Not relevant

Use restriction according to REACH annex XVII, no.:

Not relevant

National regulations

Observe in addition any national regulations!

Restrictions of occupation

No information available.

Other regulations, restrictions and prohibition regulations

None

15.2. Chemical Safety Assessment

For this preparation a chemical safety assessment has been carried out. -

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

SECTION 16: Other information

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

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Training advice

None

Recommended restrictions of use:

No special measures are necessary.

Further remarks:

-

Documentation of changes:

-

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

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