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

1.1. Product identifier

Thermeo Powder

UFI DTFS-S55N-1T3C-QKE6

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

Relevant identified uses: Manufacture.
Uses advised against: Private households (= general public).

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)274 920050-50

Supplier
pro3dure medical GmbH

Am Burgberg 13
D 58642 Iserlohn

Telephone +49 (0)2374 920050-10
Telefax: +49 (0)274 920050-50

Information contact
pro3dure medical GmbH

Information telephone +49 (0)2374 920050-10
Information telefax +49 (0)2374 920050-50
E-mail (competent person) info@pro3dure.com
Website www.pro3dure.com

1.4. Emergency telephone number

pro3dure medical GmbH
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:
Aquatic Chronic 3, H412

2.2. Label elements

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

-

Signal word: -

Hazard statements:

EUH208 Contains dibenzoyl peroxide. May produce an allergic reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273	Avoid release to the environment.
P501	Dispose of contents/container according to official regulations.

Special labelling of particular preparations:
none

2.3. Other hazards
-

SECTION 3: Composition / information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
Mixture related information

Composition/information on ingredients

Substance:	CAS-No.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):	M, ATE, Note
Polyethylmethacrylate	9003-42-3		80-100 %	Aquatic Chronic 3, H412	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Avoid contact with eyes, skin and clothing. Remove contaminated, soaked clothing. Medical attention is required in case of symptoms obviously due to exposure of skin, eyes to the product or inhalation of its vapours. Remove contaminated, soaked clothing.

In case of inhalation: After inhalation of product dust: Provide fresh air. If symptoms occur, seek medical treatment.

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

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. Consult an ophthalmologist.

After ingestion: Not considered a possible route of exposure. If symptoms occur, seek medical treatment.

4.2. Most important symptoms and effects, both acute and delayed
May cause sensitization by skin contact.

4.3. Indication of any immediate medical attention and special treatment needed
First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	ABC-powder Alcohol resistant foam Foam Water spray jet
Unsuitable extinguishing media	Excess water Full water jet Carbon dioxide (CO2) BC-powder

5.2. Special hazards arising from the substance or mixture
In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide.

5.3. Advice for firefighters
General information
Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. 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
Avoid formation of dust. Avoid contact with eyes, skin and clothing. Personal
Use personal protective clothing. Use respiratory protection when exposed to vapours/dust/aerosol. For
Provide suitable exhaust/ventilation at the workplace or at the working machines. Increased
Increased risk of slipping due to leaked/spilled product.

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
Take up mechanically, placing in appropriate containers for disposal. Avoid generation of dust.

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
Do not inhale dust. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash should be available. Take measures against electrostatic discharge.

Precautions against fire and explosion:
In case of fire, cool containers with water. Dust may form an explosive mixture with air. Ensure adequate ventilation. Dust and vapours: Do not breathe. Avoid contact with skin and eyes. Open container with care. Avoid dust accumulation. Avoid dust formation. Danger of dust explosion. Take measures against electrostatic discharge.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Avoid dust accumulation. Store tightly closed, cool and dry in the original container. Keep container closed when not in use.

Hints on joint storage
none

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/m³]	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/m³]	Limitation of exposure peaks:	Remark:

DNEL-/PNEC-values

DNEL value

Substance:	CAS-No.:	DNEL/DMEL

PNEC Value

Substance:	CAS-No.:	PNEC

Additional information

-

8.2. Exposure controls

Occupational exposure controls:

Provide adequate ventilation as well as local exhaustion 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

Respiratory protection necessary at: In the case of the formation of dust. Suitable respiratory protection apparatus: particulates filter device (DIN EN 143).

Hand protection

Material: Protective gloves against mechanical risks according to EN 388 Additional information: Protective gloves should be changed regularly, especially after intensive contact with the product, Gloves must be removed and replaced when they show signs of wear or chemical breakthrough, A suitable type of glove must be selected for each workplace, Please follow the glove supplier's instructions regarding permeability and breakthrough time. Also consider the specific local conditions in which the product will be used, such as cut hazard, abrasion and contact time.

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:
Skin contact Inhalation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state:	solid
Colour:	white
Odour:	
Odour threshold:	

Safety relevant basis data

	parameter	Value	unit	Remark
Melting point/freezing point:	about	70	°C	softening point
Initial boiling point and boiling range:				No data available
Flammability:				No data available
lower flammability or explosive limits:	>	400	°C	ASTM D1929-68
Upper flammability or explosive limits:				No data available
Flash point:	>	250	°C	none
Ignition temperature:				No data available
Decomposition temperature:		250	°C	Start of depolymerisation
pH:				No data available
Kinematic viscosity:	at 20°C.		Pa*s	No data available
Water solubility (g/L):				
Partition coefficient: n-octanol/water:				No data available
Vapour pressure:				No data available
Density:	at 20°C.	1,16	g/cm³	none
Relative density:				No data available
Particle properties:				No data available

9.2. Other information
none

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Start of depolymerisation 250 °C

10.3. Possibility of hazardous reactions
No known hazardous reactions.

10.4. Conditions to avoid
Avoid dust formation.

10.5. Incompatible materials
Oxidizing agents.

10.6. Hazardous decomposition products
Thermal decomposition produces flammable vapours which are irritating to the eyes and respiratory organs, mainly consisting of: Ethyl methacrylate

SECTION 11: Toxicological information

11.1. Information on toxicological effects
There are no data available on the mixture itself.

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

Acute toxicity

Substance:	CAS-No.:	Toxicological information
Polyethylmethacrylate		

Skin corrosion/irritation:
There are no data available on the preparation/mixture itself.

Serious eye damage/irritation:
There are no data available on the preparation/mixture itself.

Respiratory or skin sensitisation:
There are no data available on the preparation/mixture itself.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity:
There are no data available on the preparation/mixture itself.
Germ cell mutagenicity:
There are no data available on the preparation/mixture itself.
Reproductive toxicity:
There are no data available on the preparation/mixture itself.

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

SECTION 12: Ecological information

12.1. Toxicity
There are no data available on the mixture itself.

Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Polyethylmethacrylate		

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 Endocrine disruptive effect
There are no data available on the mixture itself.

12.7. 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
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
According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

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

	Yes	No
ADR/RID / IMDG / ICAO-TI / IATA-DGR:	☐	☒
Marine pollutant:	☐	☒

14.6. Special precautions for user

Land transport (ADR/RID)

transport category: - **tunnel restriction code:** -

Special provisions: - **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 -

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. -
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

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

EUH208	Contains dibenzoyl peroxide. May produce an allergic reaction.
H412	Harmful to aquatic life with long lasting effects.

Training advice
-

Recommended restrictions of use:
refer to chapter 1.

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.

Documentation of changes:
Changes from version 1:

1 UFI-code added.

Key literature references and sources for data
-

Abbreviations and acronyms

AC: Artikelkategorie (Article Category)
ACGIH: Rat für Arbeitsschutz und Gefahrstoffe, Amerika (American Conference of Government Industrial Hygienists)
ADN: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf Binnengewässern (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
ADR: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße (Accord européen relatif transport des merchandises dangereuses par route)
AGW: Arbeitsplatzgrenzwert
AOX: Adsorbierbare organisch gebundene Halogene (Adsorbable Organic halogen compounds)
Bw: Körpergewicht (Body weight)
CMR: Stoffe klassifiziert als Krebserzeugend, Mutagen oder Reproduktionstoxisch (Carcinogenic, Mutagenic, toxic for Reproduction)
CSR: Stoffsicherheitsbericht (Chemical Safety Report)
DIN: Deutsches Institut für Normung / Deutsche Industrienorm
DNEL: Grenzwert, unterhalb dessen der Stoff keine Wirkung ausübt (Derived No Effect Level)
DPD: Zubereitungsrichtline / Richtline 1999-45-EC (Dangerous Preparations Directive)
DSD: Stoffrichtlinie / Richtlinie 67-548-EC (Dangerous Substances Directive)
DU: Nachgeschalteter Anwender (Downstream User)
EC50: Wirksame Konzentration 50% (Effective Concentration 50%)
ECHA: Europäische Chemikalienagentur
EN: Europäische Norm
EWC/EWL: Europäischer Abfallartenkatalog (European Waste Catalogue)
IATA: Verband für den internationalen Lufttransport (International Air Transport Association)
IBC: Großpackmittel (Intermediate Bulk Container)
ICAO: Internationale Zivilluftfahrt-Organisation (International Civil Aviation Organization)
IMDG Code: Gefahrgutvorschriften für den internationalen Seetransport (International Maritime Dangerous Goods Code)
IMO: Internationale Seeschifffahrts-Organisation (International Maritime Organization)
ISO: Internationale Normungsorganisation (International Standards Organisation)
LC50: Lethale (Tödliche) Konzentration 50%
LD50: Lethale (Tödliche) Dosis 50%
LEV: Lokale Absaugung (Local exhaust ventilation)
MAK: Maximale Arbeitsplatzkonzentration – DFG
n.a.: nicht anwendbar
n.b.: nicht bestimmt
OEL: Arbeitsplatzgrenzwert (Occupational Exposure Limit)
PBT: persistent, bioakkumlierbar, giftig (persistent, bioaccumulative, toxic)
PNEC: Abgeschätzte Nicht-Effekt-Konzentration (Predicted No Effect Concentration)
PPE/PSA: Persönliche Schutzausrüstung (Personal Protective Equipment)
REACH: Registrierung, Bewertung und Zulassung von Chemikalien (Registration, Evaluation and Authorization of Chemicals)
RID: Gefahrgutvorschriften für den Transport mit der Eisenbahn (Règlement International concernant le transport de marchandises dangereuses par chemin de fer)
STEL: Grenzwert für Kurzzeitexposition (Short-term Exposure Limit)
SVHC: Stoff sehr hoher Besorgnis (Substance of Very High Concern)
TLV: Arbeitsplatzgrenzwert (Threshold Limit Value)
VOC: Flüchtige organische Kohlenwasserstoffe (Volatile Organic Compounds)
vPvB: sehr persistent, sehr bioakkumulierbar (very persistent, very bioaccumulative)