1. Identification

Product identifier
Renamel Microfill

Further trade names
Renamel Microfill Enamel
Renamel Microfill SuperBrite
Renamel Gingafill

Recommended use of the chemical and restrictions on use
Use of the substance/mixture
dental use

Details of the supplier of the safety data sheet

Manufacturer
Company name: Deltamed GmbH.
Street: Raiffeisenstr. 8a
Place: D-61169 Friedberg
Telephone: +49 6031 7283-0
Telefax: +49 6031 7283-29
Internet: www.deltamed.de

Responsible Department: F&E
Telex: +49 6031 7283-29

Supplier
Company name: COSMEDENT, Inc.
Street: 401 North Michigan Avenue Ste. 2500
Place: USA-IL 60611 Chicago
Telephone: 1-800-621-6729
Contact person: Mary O’ Malley
Telephone: 312-644-9586
Internet: cosmedent.com

Emergency phone number: 312-644-9586

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Hazard categories:
Respiratory or skin sensitization: Skin Sens. 1B
Hazard Statements:
May cause an allergic skin reaction

Label elements
29 CFR Part 1910.1200
Signal word: Warning
Pictograms:

Hazard statements
May cause an allergic skin reaction
Precautionary statements
Wear protective gloves/protective clothing/eye protection.
If on skin: Gently wash with plenty of soap and water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If skin irritation or rash occurs: Get medical advice/attention.

Hazard not otherwise classified
Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

3. Composition/information on ingredients

Mixtures
Chemical characterization
Mixture of acrylic resins, fillers and initiators.

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>72869-86-4</td>
<td>7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol dimethacrylate</td>
<td>* &lt; 25 %</td>
</tr>
<tr>
<td>2082-81-7</td>
<td>1,4 Butanediol dimethacrylate</td>
<td>* &lt; 25 %</td>
</tr>
</tbody>
</table>

Further Information
* The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures
General information
Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours. Take off all contaminated clothing immediately.

After inhalation
Provide fresh air. Medical treatment necessary.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes
After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion
Do NOT induce vomiting. Medical treatment necessary.

Most important symptoms and effects, both acute and delayed
No information available.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
Foam. Extinguishing powder, Carbon dioxide,
Specific hazards arising from the chemical
In case of fire may be liberated: Carbon monoxide. Carbon dioxide Hazardous decomposition products

Special protective equipment and precautions for fire-fighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions
Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up
Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling
Advice on safe handling
Provide adequate ventilation.

Advice on protection against fire and explosion
Keep away from sources of ignition. - No smoking.

Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C (40 -75°F). Can polymerize with intense heat release.

Advice on storage compatibility
Do not store together with:
Oxidising agent, strong
food

8. Exposure controls/personal protection

Control parameters

Exposure controls

Protective and hygiene measures
Avoid contact with skin, eyes and clothes. 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 or drink.

Eye/face protection
 tightly fitting goggles

Hand protection
Gloves should be replaced regularly, especially after extended contact with the product. For each work-place a suitable glove type has to be selected.
9. Physical and chemical properties

**Information on basic physical and chemical properties**

Physical state: pasty
Color: various, depending on coloration
Odor: hardly noticeable

**Test method**

pH-Value: not determined

**Changes in the physical state**

Melting point/freezing point: not determined
Initial boiling point and boiling range: not determined
Flash point: > 100 °C

**Flammability**

Solid: not applicable
Gas: not applicable

Lower explosion limits: not determined
Upper explosion limits: not determined

**Auto-ignition temperature**

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

**Vapor pressure:** not determined

**Density:** not determined

Water solubility: insoluble

Partition coefficient: not determined

Viscosity / dynamic: 150 * 1000 mPa·s

Vapor density: not determined

Evaporation rate: not determined

**Other information**

Solid content: not determined

10. Stability and reactivity

**Reactivity**

No hazardous reaction when handled and stored according to provisions.

**Chemical stability**

Stability: Stable

The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

Hazardous reactions: Will not occur

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.
Conditions to avoid
Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C (40-75°F).

Incompatible materials
Oxidising agent, Reducing agent, Heavy metals, acids, Alkali (lye)

Hazardous decomposition products
No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>728689-86-4</td>
<td>oral</td>
<td>&gt;2000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td>2082-81-7</td>
<td>oral</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td>dermal</td>
<td>&gt;3000 mg/kg</td>
<td>Rabbit</td>
<td></td>
</tr>
</tbody>
</table>

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

Sensitizing effects
May cause an allergic skin reaction (7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol dimethacrylate), (1,4 Butanediol dimethacrylate)
Possible sensitization in case of persons suffering from hypersensitivity.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met.

Carcinogenicity (NTP): None of the ingredients is listed.
Carcinogenicity (IARC): None of the ingredients is listed.
Carcinogenicity (OSHA): None of the ingredients is listed.

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

Further information
Product has not been tested. The statement is derived from the properties of the components.

12. Ecological information

Persistence and degradability
The product has not been tested.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.
## Other adverse effects

No information available.

## Further information

Do not allow uncontrolled discharge of product into the environment. Do not allow to enter into surface water or drains.

### 13. Disposal considerations

#### Waste treatment methods

**Advice on disposal**

Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Contaminated packaging**

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

### 14. Transport information

**US DOT 49 CFR 172.101**

_**Proper shipping name:**_ Not a hazardous material with respect to these transport regulations.

**Marine transport (IMDG)**

_**Other applicable information**_  
No dangerous good in sense of these transport regulations.

**Air transport (ICAO)**

_**Other applicable information**_  
No dangerous good in sense of these transport regulations.

**Special precautions for user**

No information available.

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

Not applicable

### 15. Regulatory information

#### U.S. Regulations

**National Inventory TSCA**

All components of this product are included on the TSCA Chemical Inventory ore are not required to be listed on the TSCA Chemical Inventory.

**National regulatory information**

SARA Section 311/312 Hazards:

- 7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol dimethacrylate (72869-86-4): Immediate (acute) health hazard
- 1,4 Butanediol dimethacrylate (2082-81-7): Immediate (acute) health hazard

**State Regulations**

_Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)_

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

### 16. Other information

**Hazardous Materials Information Label (HMIS)**
Health: 1
Flammability: 0
Physical Hazard: 0

NFPA Hazard Ratings
- Health: 1
- Flammability: 0
- Reactivity: 0
- Unique Hazard: 0

Changes
- Revision date: 08.09.2016
- Revision No: 1,50
- Reason of revision: classification according CLP / GHS.

Abbreviations and acronyms
- ADR: Accord européen sur le transport 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 Harmonized 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
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%

Other data
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.

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