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

· Product identifier

· Trade name: ClearTemp™ LC
· Article number: 71106
· Index number: SDS 256-001.05

· Relevant identified uses of the substance or mixture and uses advised against
  Professional Temporary Veneer Cement

· Application of the substance / the mixture
  Professional Temporary Veneer Cement

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:
  Ultradent Products Inc.
  505 W. Ultradent Drive (10200 S)
  South Jordan, UT 84095-3942
  USA
  onlineordersupport@utradent.com

EC Responsible Person
Ultradent Products GmbH
Am Westhover Berg 30
51149 Cologne Germany
Email: infoDe@utradent.com
Emergency Phone: +49(0)2203-35-92-0

· Further information obtainable from: Customer Service
· Emergency telephone number:
  CHEMTREC (NORTH AMERICA) :(800) 424-9300
  (INTERNATIONAL) : +(703) 527-3887

2 Hazards identification

· Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

  GHS07

  Skin Irrit. 2  H315  Causes skin irritation.
  Eye Irrit. 2  H319  Causes serious eye irritation.
  Skin Sens. 1  H317  May cause an allergic skin reaction.
  STOT SE 3  H335  May cause respiratory irritation.

· Label elements

· Labelling according to Regulation (EC) No 1272/2008
  The Regulation EC 1272/2008 on classification, labeling and packaging of substances and mixtures (CLP) shall not apply to a medical device in the finished state used in direct physical contact with the human body according to Art. 1.5 (d). Therefore, the product is exempted from the CLP labeling requirements, and no SDS is required by Regulation 1907/2006, Art. 2 (6c), REACH. Therefore, all given data, classification, and information on this SDS are provided solely on a voluntary basis.

· Hazard pictograms GHS07

· Signal word Warning

· Hazard-determining components of labelling:
  Triethylene Glycol Dimethacrylate
Trade name: ClearTemp™ LC

Trade Secret
Methacrylic Acid

· Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

· Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash 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.
P280 Wear protective gloves / eye protection / face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P313 If skin irritation or rash occurs: Get medical advice/attention.
P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Chemical Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>109-16-0</td>
<td>203-652-6</td>
<td>Triethylene Glycol Dimethacrylate</td>
<td>&lt;40%</td>
</tr>
<tr>
<td>79-41-4</td>
<td>201-204-4</td>
<td>Methacrylic Acid</td>
<td>&lt;5%</td>
</tr>
</tbody>
</table>

Trade Secret
Skin Sens. 1, H317
Skin Corr. 1A, H314; Eye Dam. 1, H318
Acute Tox. 3, H331; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312

· Additional information: For the wording of the listed hazard phrases refer to section 16.
4 First aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: This product is a thick paste, therefore inhalation is extremely unlikely.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If swallowed in large quantities seek medical attention.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: Foam, dry chemical, carbon dioxide
  Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters:
- Protective equipment:
  Wear self-contained respiratory protective device.
  Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up:
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- Handling:
- Precautions for safe handling:
  Avoid contact with eyes, skin, and clothing. Use suitable protective equipment.
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- Information about fire - and explosion protection:
  Protect from heat.
  Keep ignition sources away - Do not smoke.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>WEL (Great Britain)</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-41-4 Methacrylic Acid</td>
<td>Short-term: 143 mg/m³, 40 ppm</td>
</tr>
</tbody>
</table>

- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the eyes and skin.

- **Respiratory protection:**
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**

  ![Protective gloves]

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
  - The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**
  - The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**

  ![Tightly sealed goggles]

  (Contd. on page 5)
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - Appearance:
    - Form: Paste
    - Colour: Light yellow
  - Odour: Acrylic
  - Odour threshold: Not determined.
  - pH-value: Not determined.
- **Change in condition**
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: Undetermined.
- **Flash point**: Not applicable.
- **Flammability (solid, gas)**: Not applicable.
- **Decomposition temperature**: Not determined.
- **Auto-ignition temperature**: Product is not selfigniting.
- **Explosive properties**: Product does not present an explosion hazard.
- **Explosion limits**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapour pressure**: Not determined.
- **Density**: Not determined.
- **Relative density**: Not determined.
- **Vapour density**: Not determined.
- **Evaporation rate**: Not determined.
- **Solubility in / Miscibility with water**: Not miscible or difficult to mix.
- **Partition coefficient: n-octanol/water**: Not determined.
- **Viscosity**
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- **Solvent content**: VOC (EC) <5%
- **Other information**: No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

II Toxicological information

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

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>ATE (Acute Toxicity Estimates)</th>
<th>Oral LD50</th>
<th>26,173 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal LD50</td>
<td>12,346 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>2.08 mg/l (rat)</td>
<td></td>
</tr>
</tbody>
</table>

109-16-0 Triethylene Glycol Dimethacrylate

| Oral LD50                     | >5,000 mg/kg (rat) |
| LC50 Fish                     | 16.4 mg/l (Fish) (Toxicity to fish) |
| Dermal LD50                   | >2,000 mg/kg (mouse) |

79-41-4 Methacrylic Acid

| Oral LD50                     | 1,250 mg/kg (mouse) |
| Dermal LD50                   | 1,000 mg/kg (Guinea pig) |
| LC50 Fish                     | 86 mg/l (Fish) |
| Inhalative LC50/4 h           | 7.1 mg/l (rat) |

Primary irritant effect:
Skin corrosion/irritation Causes skin irritation.
Serious eye damage/irritation Causes serious eye irritation.
Respiratory or skin sensitisation May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity 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.

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.
### 12 Ecological information

- **Toxicity**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Biodegradability</th>
<th>Aquatic toxicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>109-16-0 Triethylene Glycol Dimethacrylate</td>
<td>28 days (Aerobic) (Biodegradability testing)</td>
<td>32 mg/l (daphnia) (No Observed Effect Concentration)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;100 mg/l (Algae) (Toxicity to algae)</td>
</tr>
<tr>
<td>79-41-4 Methacrylic Acid</td>
<td></td>
<td>&lt;180 mg/kg (daphnia) (Toxicity to aquatic invertebrates)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>45 mg/l (Algae) (Toxicity to algae)</td>
</tr>
</tbody>
</table>

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:**
    - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.
  - **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**
    - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  - **European waste catalogue**
    - HP8 Corrosive
    - HP13 Sensitising
  - **Uncleaned packaging:**
    - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
  - **ADR, ADN, IMDG, IATA** not regulated
- **UN proper shipping name**
  - **ADR, ADN, IMDG, IATA** not regulated
- **Transport hazard class(es)**
  - **ADR, ADN, IMDG, IATA** not regulated

(Contd. on page 8)
Trade name: ClearTemp™ LC

- Packing group
  - ADR, IMDG, IATA: not regulated
- Environmental hazards:
  - Not applicable.
- Special precautions for user:
  - Not applicable.
- Transport in bulk according to Annex II of Marpol and the IBC Code:
  - Not applicable.
- UN "Model Regulation":
  - not regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- Chemical safety assessment:
  - Device is biocompatible when used as directed by dental professionals per ISO 10993-1

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H331 Toxic if inhaled.
- Department issuing SDS: Regulatory Affairs
- Contact: Customer Service
- 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 Harmonised 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 (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LDS0: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Acute Tox. 4: Acute toxicity - oral – Category 4
  - Acute Tox. 3: Acute toxicity - inhalation – Category 3
  - Skin Corr. 1A: Skin corrosion/irritation – Category 1A
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Skin Sens. 1: Skin sensitisation – Category 1
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3