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

1.1 Product identifier
- **Trade name:** HeraCeram opaque liquid

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
- **Manufacturer/Supplier:** Kulzer GmbH
  Leipziger Straße 2, 63450 Hanau (Germany)
  **Tel.: +49 (0)800 4372522**
- **Informing department:** E-Mail: msds@kulzer-dental.com

1.4 Emergency telephone number:
- **Emergency CONTACT (24-Hour-Number):** +49 (0)6132-84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  The product is not classified according to the CLP regulation.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

2.3 Other hazards
- Results of PBT and vPvB assessment
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
- **Description:** -

- **Dangerous components:**
  - **CAS:** 64-17-5
  - **EINECS:** 200-578-6
  - **Reg.nr.:** 2119457610-43-xxxx
  - **ethanol Flam. Liq. 2, H225 0-5%**

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
- **General information** No special measures required.
- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Rinse out mouth and then drink plenty of water.
**In case of persistent symptoms consult doctor.**
Trade name: HeraCeram opaque liquid

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

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

**SECTION 5: Firefighting measures**

5.1 Extinguishing media
- Suitable extinguishing agents
  CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
- Protective equipment: No special measures required.
- Additional information

**SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions: Dilute with much water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).

6.4 Reference to other sections
No dangerous materials are released.
See Section 8 for information on personal protection equipment.

**SECTION 7: Handling and storage**

7.1 Precautions for safe handling
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
- Storage
  - Requirements to be met by storerooms and containers: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.

7.3 Specific end use(s)
No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

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

8.1 Control parameters
- Components with critical values that require monitoring at the workplace:
  64-17-5 ethanol
  OES [] Long-term value: 1920 mg/m³, 1000 ppm

(Contd. on page 3)
### DNELs

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>ge.pop., l.te, syst.</td>
<td>worker profess., l.te., syst.</td>
<td>worker profess., acute, local</td>
</tr>
<tr>
<td></td>
<td>87 mg/Kg (nd)</td>
<td>343 mg/Kg/d (nd)</td>
<td>1900 mg/m3 (nd)</td>
</tr>
<tr>
<td></td>
<td>ge.pop., acu., local</td>
<td>950 mg/Kg/d (nd)</td>
<td>1900 mg/m3 (nd)</td>
</tr>
<tr>
<td></td>
<td>ge.pop., l.te, syst.</td>
<td>206 mg/Kg/d (nd)</td>
<td>114 mg/m3 (nd)</td>
</tr>
<tr>
<td></td>
<td>ge.pop., acu., local</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ge.pop., l.te, syst.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PNECs

<table>
<thead>
<tr>
<th>Substance</th>
<th>freshwater</th>
<th>marine water</th>
<th>STP</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>0.96 mg/l (nd)</td>
<td>0.79 mg/l (nd)</td>
<td>580 mg/l (nd)</td>
</tr>
<tr>
<td></td>
<td>sedim., dw, fre.wat.</td>
<td>3.6 mg/Kg (nd)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>soil,dw</td>
<td>0.63 mg/Kg (nd)</td>
<td></td>
</tr>
</tbody>
</table>

**Additional information:** The lists that were valid during the compilation were used as basis.

### 8.2 Exposure controls

- **Personal protective equipment**
  - **General protective and hygienic measures**
    The usual precautionary measures should be adhered to in handling the chemicals.
  - **Breathing equipment:** Not required.
  - **Protection of hands:**
    Check protective gloves prior to each use for their proper condition.
    recommended
  - **Material of gloves**
    The selection of the 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 break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
    Butyl rubber, BR
    Nitrile rubber, NBR
  - **Eye protection:** not absolutely necessary
  - **Body protection:** Light weight protective clothing

(Contd. on page 4)
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

- **Appearance:** Fluid
- **Form:** Colourless
- **Smell:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.

Change in condition

- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** 98 °C

- **Flash point:** Not applicable
- **Inflammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.

- **Critical values for explosion:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.

- **Steam pressure at 20 °C:** 23 hPa

- **Density at 20 °C:** 0.980 g/cm³
  - **Relative density:** Not determined.
  - **Vapour density:** Not determined.
  - **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with**
  - **Water:** Fully miscible

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  - **dynamic:** Not determined.
  - **kinematic:** Not determined.

- **Solvent content:**
  - **Water:** 96.0 %

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

- **Conditions to be avoided:** No decomposition if used and stored according to specifications.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

- LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral LD50</th>
<th>Oral LC50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>6200 mg/kg (rat)</td>
<td>95.6 mg/l (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - 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: Based on available data, the classification criteria are not met.
  - 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.

SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.

- 12.2 Persistence and degradability: No further relevant information available.

- 12.3 Bioaccumulative potential: No further relevant information available.

- 12.4 Mobility in soil: No further relevant information available.

- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

- 12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation: Smaller quantities can be disposed with household garbage.

- European waste catalogue

18 01 06 chemicals consisting of or containing dangerous substances

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
**SECTION 14: Transport information**

- **14.1 UN-Number**
  - ADR, ADN, IMDG, IATA: Void
- **14.2 UN proper shipping name**
  - ADR, ADN, IMDG, IATA: Void
- **14.3 Transport hazard class(es)**
  - ADR, ADN, IMDG, IATA
    - Class: Void
- **14.4 Packing group**
  - ADR, IMDG, IATA: Void
- **14.5 Environmental hazards:**
  - Marine pollutant: No
- **14.6 Special precautions for user**
  - Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.
- **Transport/Additional information:**
  - -
- **UN "Model Regulation":**
  - Void

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - National regulations
    - Water hazard class: Generally not hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
- **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
<table>
<thead>
<tr>
<th><strong>Trade name:</strong> HeraCeram opaque liquid</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: Chemical Abstracts Service (division of the American Chemical Society)</td>
<td></td>
</tr>
<tr>
<td>DNEL: Derived No-Effect Level (REACH)</td>
<td></td>
</tr>
<tr>
<td>PNEC: Predicted No-Effect Concentration (REACH)</td>
<td></td>
</tr>
<tr>
<td>LC50: Lethal concentration, 50 percent</td>
<td></td>
</tr>
<tr>
<td>LD50: Lethal dose, 50 percent</td>
<td></td>
</tr>
<tr>
<td>PBT: Persistent, Bioaccumulative and Toxic</td>
<td></td>
</tr>
<tr>
<td>vPvB: very Persistent and very Bioaccumulative</td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2: Flammable liquids – Category 2</td>
<td></td>
</tr>
<tr>
<td>* Data compared to the previous version altered.</td>
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