1 Identification

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

- **Application of the substance / the mixture** Manufacture of dental prosthesis

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Kulzer GmbH
    Leipziger Straße 2, 63450 Hanau (Germany)
    Tel.: +49 (0)800 4372522
  - **Information department:**
    Tel. +1 (800) 431-1785  Fax: +1 (800) 522-1545
    e-mail: customer.servicehkna@kulzer-dental.com
  - **Emergency telephone number:**
    Emergency CONTACT (24-Hour-Number)
    GBK/Infotrac ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

- **Classification system**
  - **NFPA ratings for USA (scale 0-4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0
  - **HMIS-Ratings (Scale 0-4)**
    - HEALTH Health = 0
    - FIRE Fire = 0
    - REACTIVITY Reactivity = 0

- **Other hazards** -

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
  - **Description:** -

- **Dangerous components:**
  - 64-17-5 ethanol Flammable Liquids - Category 2, H225 0-5% w/w

- **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** No special measures required.
  - **After skin contact** Generally the product does not irritate the skin.
  - **After eye contact** Rinse opened eye for several minutes under running water.
  - **After swallowing** Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.

- **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 Fire-fighting measures**

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

- **Advice for firefighters**
  - **Protective equipment**: No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.

- **Environmetal precautions**: Dilute with plenty of water.

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

- **Reference to other sections**
  - No dangerous substances are released. See Section 8 for information on personal protection equipment.

- **Further information about storage conditions**: None.

**7 Handling and storage**

- **Handling**
  - **Precautions for safe handling** No special measures required.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
    - **Requirements to be met by storerooms and receptacles**: No special requirements.
    - **Information about storage in one common storage facility**: Not required.
    - **Further information about storage conditions**: None.
Trade name: HeraCeram opaque liquid

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

8 Exposure controls/personal protection

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

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>EL () 1000 ppm</td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the creation were used as basis.

Control parameters

- Exposure controls
  - Personal protective equipment
    - General protective and hygienic measures
      The usual precautionary measures for handling chemicals should be followed.
    - 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 through 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

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Color: Colorless
    - Odor: Characteristic
    - Odor threshold: Not determined.
  - pH-value: Not determined.
  - Change in condition
    - Melting point/Melting range: undetermined
Trade name: HeraCeram opaque liquid

**Boiling point/Boiling range:** 98 °C (208 °F)

**Flash point:** Not applicable

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:**

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

- **Lower:** Not determined.
- **Upper:** Not determined.

**Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)

**Density at 20 °C (68 °F):** 0.980 g/cm³ (8.178 lbs/gal)

- **Relative density:** Not determined.
- **Vapor 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%
- **Other information:** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **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:** none

(Contd. on page 5)
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      - 64-17-5 ethanol
        - Oral LD50: 6200 mg/kg (rat)
        - Inhalative LC50/4 h: 95.6 mg/l (rat)
        - RTECS, Resorption Symptome: leichte Schleimhautreizung
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems:
    - Bioaccumulative potential: No further relevant information available.
    - Mobility in soil: No further relevant information available.
- 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: Smaller quantities can be disposed of with household waste.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
Trade name: HeraCeram opaque liquid

14 Transport information

- UN-Number
  - DOT, TDG, ADN, IMDG, IATA: Void
- UN proper shipping name
  - DOT, TDG, ADN, IMDG, IATA: Void
- Transport hazard class(es)
  - DOT, TDG, ADN, IMDG, IATA: Void
  - Class: Void
- Packing group
  - DOT, TDG, IMDG, IATA: Void
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
- Transport/Additional information: -
- UN "Model Regulation": Void

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - SARA Section 355 (extremely hazardous substances)
    - None of the ingredients is listed.
- GHS label elements: Void
  - Hazard pictograms: Void
  - Signal word: Void
  - Hazard statements: Void
- National regulations
  - Water hazard class: Generally not hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.
- Date of preparation / last revision: 06/03/2017 / 2
Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.