1 Identification

- Product identifier
  - Trade name: HeraCeram, HeraCeramSun paste opaque
    - Pre-Opaque, Basic-Opaque, Intensive-Opaque
  - Application of the substance / the mixture: Manufacture of dental prothesis

- 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 = 1
    Reactivity = 0
  - HMIS-Ratings (Scale 0-4)
    HEALTH 0
    FIRE 1
    REACTIVITY 0
    Health = 0
    Fire = 1
    Reactivity = 0

- Other hazards -

3 Composition/information on ingredients

- Chemical characterization: Mixtures
  - Description: -
  - Dangerous components: Void
  - 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
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  - 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. Drink copious amounts of water and provide fresh air. Immediately call a doctor. 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.
    Use fire fighting measures that suit the environment.
  - Special hazards arising from the substance or mixture
    No further relevant information available.
  - Advice for firefighters
    - Protective equipment:
      No special measures required.
    - Additional information

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Not required.
- Environmental precautions:
  No special measures required.
- Methods and material for containment and cleaning up:
  Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues). Dispose contaminated material as waste according to item 13.
- Reference to other sections
  No dangerous substances are released.
  See Section 8 for information on personal protection equipment.

7 Handling and storage

- Handling
  - Precautions for safe handling
    No special measures required.
  - Information about protection against explosions and fires
    No special measures required.
Trade name: HeraCeram, HeraCeramSun paste opaque

8 Exposure controls/personal protection

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

- Control parameters
  - Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - Additional information: The lists that were valid during the creation were used as basis.

- 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: Pasty
      - Color: Different according to coloring
      - Odor: Characteristic
### 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
11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

110-63-4 butane-1,4-diol

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/LC50</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1525 mg/kg (rat)</td>
<td>Oral LD50</td>
</tr>
</tbody>
</table>

· 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.

· Additional ecological information:

  · General notes:
    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: Smaller quantities can be disposed of with household waste.
14 Transport information

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>DOT, TDG, ADN, IMDG, IATA</th>
<th>Void</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>DOT, TDG, ADN, IMDG, IATA</td>
<td>Void</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>DOT, TDG, ADN, IMDG, IATA</td>
<td>Void</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>DOT, TDG, IMDG, IATA</td>
<td>Void</td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td>None pollutant:</td>
<td>No</td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Transport/Additional information:</strong></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;:</strong></td>
<td>Void</td>
<td></td>
</tr>
</tbody>
</table>

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 |
| **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.

| **Date of preparation / last revision** | 06/03/2017 / 3 |
| **Abbreviations and acronyms:** | IMDG: International Maritime Code for Dangerous Goods |
| | DOT: US Department of Transportation |
| | IATA: International Air Transport Association |
Trade name: HeraCeram, HeraCeramSun paste opaque

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.