1 Identification

- **Product identifier**
  - **Trade name:** Carboxylate Cement Powder

- **Application of the substance / the mixture** Dental cement

- **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 = 0
    - Fire = 0
    - Reactivity = 0

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

3 Composition/information on ingredients

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

- **Dangerous components:**
  - Zinc oxide 75-90%
  - 1309-48-4 Magnesium oxide 5-10%

(Contd. on page 2)
Trade name: Carboxylate Cement Powder

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.
  · Special hazards arising from the substance or mixture No further relevant information available.
  · Advice for firefighters
    · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.
  · Environmental precautions:
    Inform respective authorities in case of seepage into water course or sewage system.
  · Methods and material for containment and cleaning up: Pick up mechanically.
  · 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.
  · Conditions for safe storage, including any incompatibilities
    · Storage
      · Requirements to be met by storerooms and receptacles: No special requirements.
Trade name: Carboxylate Cement Powder

- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- 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.

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>zinc oxide</strong></td>
</tr>
<tr>
<td>PEL () 15*; 5** mg/m³</td>
</tr>
<tr>
<td>Dust only *Total dust **Respirable dust</td>
</tr>
<tr>
<td>REL () Short-term value: C 15*;10** mg/m³</td>
</tr>
<tr>
<td>Long-term value: 5;5** mg/m³</td>
</tr>
<tr>
<td>TLV () Short-term value: 10 R mg/m³</td>
</tr>
<tr>
<td>Long-term value: 2 R mg/m³</td>
</tr>
</tbody>
</table>

- 1309-48-4 magnesium oxide

<table>
<thead>
<tr>
<th>PEL () 15* mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Total particulate</td>
</tr>
<tr>
<td>TLV () 10 I mg/m³</td>
</tr>
</tbody>
</table>

- 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.
Trade name: Carboxylate Cement Powder

- **Body protection:** Light weight protective clothing

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  
  - **General Information**
    - **Appearance:**
      - **Form:** Powder
      - **Color:** Colorless
      - **Odor:** Odorless
      - **Odor threshold:** Not determined.
  
  - **pH-value:** Not applicable.

- **Change in condition**
  
  - **Melting point/Melting range:** Undetermined
  
- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not determined.

- **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.
  
- **Vapor pressure:** Not applicable.

- **Density:** Not determined
  
  - **Bulk density:** 500 kg/m³
  
- **Solubility in / Miscibility with**
  
  - **Water:** Insoluble

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

- **Viscosity:**
  
  - **Dynamic:** Not applicable.
  
- **Solvent content:**
  
  - **Solids content:** 100.0 %
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: None.
- Hazardous decomposition products: None.
13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings**
  - **Recommendation**: Packaging can be reused or recycled after cleaning.

14 Transport information

- **UN-Number**
  - DOT, ADR, IMDG, IATA: Void

- **UN proper shipping name**
  - DOT, ADR, IMDG, IATA: Void

- **Transport hazard class(es)**
  - DOT, IMDG
    - **Class**: Void
  - ADR, IATA
    - **Class**: Void

- **Packing group**
  - DOT, ADR, IMDG, IATA: Void

- **Environmental hazards**
  - Marine pollutant: Yes
  - Special marking (ADR): Symbol (fish and tree)
  - Special marking (IATA): Symbol (fish and tree)

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.
Trade name: Carboxylate Cement Powder

- Transport/Additional information:
- UN "Model Regulation": UN3077, Environmentally hazardous substances, solid, n.o.s. (zinc oxide), 9, III

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.
- Cancerogenity categories
- TLV (Threshold Limit Value established by ACGIH)
  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 / 2
- 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
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  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)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
- * Data compared to the previous version altered.