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

1. **Product identifier**
   - **Trade name:** Carboxylate Cement Liquid

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

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

**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**

1. **Classification of the substance or mixture**
   - **Classification according to Regulation (EC) No 1272/2008**
     - Skin Corr. 1A, H314 Causes severe skin burns and eye damage.

2. **Label elements**
   - **Labelling according to Regulation (EC) No 1272/2008**
     - The product is classified and labelled according to the CLP regulation.

   - **Hazard pictograms**

   - **GHS05**

   - **Signal word** Danger

   - **Hazard statements**
     - H314 Causes severe skin burns and eye damage.

   - **Precautionary statements**
     - P260 **Do not breathe dust/fume/gas/mist/vapours/spray.**
     - P303+P361+P353 **IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.**
       - **Rinse skin with water/shower.**
     - P305+P351+P338 **IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**
     - P310 **Immediately call a POISON CENTER/doctor.**
     - P321 **Specific treatment (see on this label).**
     - P405 **Store locked up.**

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: Void
  · 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.
  · 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.
· Information about protection against explosions and fires: No special measures required.

(Contd. of page 1)
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

8.1 Control parameters
   Components with critical 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 compilation were used as basis.

8.2 Exposure controls
   Personal protective equipment
   · General protective and hygienic measures
     Wash hands during breaks and at the end of the work.
   · 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 neccessary
       · Body protection: Light weight protective clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
   General Information
   · Appearance:
     · Form: Fluid
     · Colour: Colourless
     · Smell: Odourless

(Contd. on page 4)
**Trade name:** Carboxylate Cement Liquid

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Inflammability (solid, gaseous)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Self-inflammability</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td>Critical values for explosion</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td>Steam pressure at 20 °C</td>
<td>23 hPa</td>
</tr>
<tr>
<td>Density at 20 °C</td>
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</tr>
<tr>
<td>Relative density</td>
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</tr>
<tr>
<td>Vapour density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
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</tr>
<tr>
<td>Solubility in / Miscibility with</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Fully miscible</td>
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<tr>
<td>Partition coefficient (n-octanol/water)</td>
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<tr>
<td>Viscosity</td>
<td></td>
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</tr>
<tr>
<td>kinematic</td>
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<tr>
<td>Solvent content</td>
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<tr>
<td>VOC EU</td>
<td>9 g/l</td>
</tr>
</tbody>
</table>

**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.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** None

(Contd. on page 5)
Trade name: **Carboxylate Cement Liquid**

- Additional information: -

### 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:**
    
    | Polyacrylsäure |
    | --- |
    | Oral LD50 | > 5000 mg/kg (rat) |

  - **Primary irritant effect:**
    
    - **Skin corrosion/irritation**
      Causes severe skin burns and eye damage.
    
    - **Serious eye damage/irritation**
      Causes severe skin burns and eye damage.

  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

  - **CMR effects (carcinogenity, 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**
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - **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.

- **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

(Contd. on page 7)
Trade name: Carboxylate Cement Liquid

CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweis (Swiss Ordinance on volatile organic compounds)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Corr. 1A: Skin corrosion/irritation – Category 1A

* Data compared to the previous version altered.