1 Identification

- Product identifier
  - Trade name: Gluma Desensitizer

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

- Application of the substance / the mixture
  For desensitisation of teeth

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    Heraeus Kulzer GmbH
    Grüner Weg 11, D-63450 Hanau
    Tel.: 0800 4372522
  - Information department:
    Marc Henn
    Tel. +1 (574) 2995444 / Fax: +1 (574) 2912542
    e-mail: marc.henn@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
  Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  Eye Dam. 1 H318 Causes serious eye damage.
  Skin Irrit. 2 H315 Causes skin irritation.
  Skin Sens. 1 H317 May cause an allergic skin reaction.

- Label elements
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
      - Hazard pictograms
        GHS05 GHS08
  - Signal word Danger
  - Hazard-determining components of labeling:
    2-hydroxyethyl methacrylate
    glutaral
  - Hazard statements
    Causes skin irritation.
    Causes serious eye damage.
    May cause allergy or asthma symptoms or breathing difficulties if inhaled.
    May cause an allergic skin reaction.
  - Precautionary statements
    In case of inadequate ventilation wear respiratory protection.
    Avoid breathing dust/fume/gas/mist/vapours/spray.
    Wear protective gloves/protective clothing/eye protection/face protection.
    IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    Specific treatment (see on this label).
    Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Gluma Desensitizer

- Classification system
  - NFPA ratings for USA (scale 0-4)
    - Health = 2
    - Fire = 0
    - Reactivity = 0
  - HMIS-Ratings (Scale 0-4)
    - Health = *2
    - 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:
  
<table>
<thead>
<tr>
<th>Dangerous components</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>868-77-9 2-hydroxyethyl methacrylate</td>
<td>25-50%</td>
</tr>
<tr>
<td>111-30-8 glutaral</td>
<td>5-10%</td>
</tr>
</tbody>
</table>

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
    - Immediately wash with water and soap and rinse thoroughly.
  - After eye contact
    - Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing
    - Immediately call a 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
    - Formation of toxic gases is possible during heating or in case of fire.
  - Advice for firefighters
    - Protective equipment: Mount respiratory protective device.
    - 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.
  - Send for recovery or disposal in suitable receptacles.
- Reference to other sections
  - See Section 13 for disposal information.
  - See Section 8 for information on personal protection equipment.

7 Handling and storage

- Precautions for safe handling
  - Keep receptacles tightly sealed.
  - Wear protective equipment. Keep unprotected persons away.
  - Ensure good ventilation/exhaustion at the workplace.
  - 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.
    - 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.
- Control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>REL (mg/m³)</th>
<th>TLV (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-30-8 glutaral</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>0.2</td>
<td>0.05</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
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing.
      - Wash hands before breaks and at the end of work.
      - Avoid contact with the eyes and skin.
      - Breathing equipment: Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).
    - Protection of hands: If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.
      - Solvent resistant gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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
- **Eye protection:**
  - Before use, put on the protective goggles and cover the patient’s eyes to protect against splashes of material.
- **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: Aromatic
    - **pH-value at 20 °C (68 °F):** 4.0
    - **Change in condition**
      - Melting point/Melting range: undetermined
      - Boiling point/Boiling range: 100 °C (212 °F)
    - **Flash point:** Not applicable
    - **Ignition temperature:** 230.0 °C (446 °F)
    - **Auto igniting:** Product is not selfigniting.
    - **Danger of explosion:** Product does not present an explosion hazard.
    - **Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)
    - **Density at 20 °C (68 °F):** 1.16 g/cm³ (9.68 lbs/gal)
    - **Solubility in / Miscibility with**
      - Water: Not miscible or difficult to mix
    - **Solvent content:**
      - Water: 58.8 %
    - **Other information**
      - No further relevant information available.

### 10 Stability and reactivity

- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

(Contd. on page 5)
**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:**
    | Oral LD50 | > 2000 mg/kg (rat) |
  - **Primary irritant effect:**
    - **on the skin:** Irritant to skin and mucous membranes.
    - **on the eye:** Strong irritant with the danger of severe eye injury.
  - **Sensitization:**
    - Sensitization possible through inhalation.
    - Sensitization possible through skin contact.
  - **Additional toxicological information:**
    - Harmful
    - Irritant

- **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.
  - **OSHA-Ca (Occupational Safety & Health Administration)**
    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.
  - **Bioaccumulative potential:** No further relevant information available.
  - **Mobility in soil:** No further relevant information available.

- **Additional ecological information:**
  - **General notes:**
    - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    - Danger to drinking water if even extremely small quantities leak into the ground.
  - **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**
  - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)
Trade name: Gluma Desensitizer

14 Transport information

- UN-Number
  - DOT, ADR, ADN, IMDG, IATA: Void
- UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA: Void
- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA
    - Class: Void
- Packing group
  - DOT, ADR, 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”: -

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)
    - 111-30-8 glutaral: A4
- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - GHS05
    - GHS08
- Signal word: Danger
- Hazard-determining components of labeling:
  - 2-hydroxyethyl methacrylate
  - glutaral
- Hazard statements
  - Causes skin irritation.
  - Causes serious eye damage.
  - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Trade name: Gluma Desensitizer

(Contd. of page 6)

May cause an allergic skin reaction.

**Precautionary statements**

In case of inadequate ventilation wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Dispose of contents/container in accordance with local/regional/national/international regulations.

**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** 05/12/2015 / -
- **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)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  - Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
  - Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- *Data compared to the previous version altered.*