# 1 Identification

- **Product identifier**
  - **Trade name:** Xantopren function hardener 2

- **Application of the substance / the mixture** Activator for dental impression material

- **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**
  - Skin Irritation - Category 2: H315 Causes skin irritation.
  - Eye Irritation - Category 2A: H319 Causes serious eye irritation.
  - Specific Target Organ Toxicity - Repeated Exposure - Category 2: H373 May cause damage to organs through prolonged or repeated exposure.

- **Label elements**
  - **GHS label elements**
    - The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS07
    - GHS08

- **Signal word** Warning

- **Hazard-determining components of labeling:**
  - dibutyltin dilaurate

- **Hazard statements**
  - Causes skin irritation.
  - Causes serious eye irritation.
  - May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**
  - Do not breathe dust/fume/gas/mist/vapours/spray.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Wash thoroughly after handling.
  - 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).
  - If eye irritation persists: Get medical advice/attention.
Trade name: Xantopren function hardener 2

3 Composition/information on ingredients
· Chemical characterization: Mixtures
  · Description: Activator for use with condensation curing silicone-based impression materials
  · 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
  · After skin contact Immediately wash with water and soap and rinse thoroughly.
  · After eye contact
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  · After swallowing
    Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor. Seek immediate medical advice.
  · 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
  - Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
  - Protective equipment: No special measures required.
  - Additional information -

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  - Inform respective authorities in case of seepage into water course or sewage system.
- 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

- Handling
  - Precautions for safe handling
    - Keep receptacles tightly sealed.
    - 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.
43. 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.

44. 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 required.
  - Protection of hands:
    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
    Solvent resistant gloves
    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: Safety glasses
  - Body protection: Light weight protective clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Color: Yellow
      - Odor: Aromatic
      - Odor threshold: Not determined.
    - pH-value: Not determined.
### Change in condition
- Melting point/Melting range: undetermined
- Boiling point/Boiling range: 270 °C (518 °F)

### Flash point:
146 °C (295 °F)

### 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: Not determined.

### Density at 20 °C (68 °F):
- Relative density: Not determined.
- Vapor density: Not determined.
- Evaporation rate: Not determined.

### Solubility in / Miscibility with
- Water: Not miscible or difficult to mix

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

### Viscosity:
- Dynamic: Not determined.
- Kinematic: Not determined.

### 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
- Additional information: -

### 11 Toxicological information
- Information on toxicological effects
- Acute toxicity:
- LD/LC50 values that are relevant for classification:
  - Oral LD50: 4735 mg/kg (rat)
Trade name: Xantopren function hardener 2

110-27-0 isopropyl myristate

<table>
<thead>
<tr>
<th></th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;10000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;5000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** 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.

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.
- **Ecotoxicological effects:**
  - Remark: Very toxic for fish
- **Additional ecological information:**
  - General notes:
    - Do not allow product to reach ground water, water course or sewage system.
    - Danger to drinking water if even small quantities leak into the ground.
    - Also poisonous for fish and plankton in water bodies.
    - Very toxic for aquatic organisms
  - 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.
Trade name: Xantopren function hardener 2

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>UN3082</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOT, TDG, IMDG, IATA</strong></td>
<td>3082</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>UN proper shipping name</strong></th>
<th>2788 ORGANOTIN COMPOUND, LIQUID, N.O.S. (dibutyltin dilaurate)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOT, IMDG, IATA</strong></td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyltin dilaurate)</td>
</tr>
</tbody>
</table>

- **Transport hazard class(es)**
  - **DOT, IMDG, IATA**
    - **Class**
      - 9 Miscellaneous dangerous substances and articles
    - **Label**
      - 9
  - **TDG (Transport dangerous goods):**
    - **Class**
      - 9 (M6) Miscellaneous dangerous substances and articles
    - **Label**
      - 9

- **Packing group**
  - **DOT, TDG, IMDG, IATA**
    - III

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

- **Special precautions for user**
  - **Danger code (Kemler):** 90
  - **EMS Number:** F-A,S-A

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

(Contd. on page 8)
Trade name: Xantopren function hardener 2

-(Contd. of page 7)

- Transport/Additional information: -
  - DOT
    - Remarks: Special marking with the symbol (fish and tree).
- UN "Model Regulation": UN3082, Environmentally hazardous substances, liquid, n.o.s. (dibutyltin dilaurate), 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.
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
    - Hazard pictograms
      - GHS07
      - GHS08
    - Signal word Warning
    - Hazard-determining components of labeling: dibutyltin dilaurate
    - Hazard statements
      Causes skin irritation.
      Causes serious eye irritation.
      May cause damage to organs through prolonged or repeated exposure.
    - Precautionary statements
      Do not breathe dust/fume/gas/mist/vapours/spray.
      Wear protective gloves/protective clothing/eye protection/face protection.
      Wash thoroughly after handling.
      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).
      If eye irritation persists: Get medical advice/attention.
- 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:
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association

(Contd. on page 9)
**Trade name:** Xantopren function hardener 2

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association (USA)</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Materials Identification System (USA)</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System (Canada)</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.