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

· 1.1 Product identifier
  · Trade name: Zircate Prophy Paste

· 1.2 Relevant identified uses of the substance or mixture and uses advised against
  · Application of the substance / the mixture
    Tooth cleanser
    Polishing paste
  · Uses advised against No further relevant information available.

· 1.3 Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Dentsply DeTrey GmbH
    De-Trey-Str. 1
    D-78467 Konstanz
    GERMANY
    Tel.: +49-(0)7531-583-0
    Fax: +49-(0)7531-583-104
    email: KonstanzDEU.info-sdb@dentsplysirona.com

· Further information obtainable from:
  - Departement Research & Development for technical information
  - Departement Marketing & Sales for distribution of the safety data sheets

· 1.4 Emergency telephone number: +49-(0)7531-583-0  8:00 - 17:00 (GMT + 1:00)

* SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture
  · Classification according to Regulation (EC) No 1272/2008
    The product is not classified, according to the CLP regulation.

· 2.2 Label elements
  · Labelling according to Regulation (EC) No 1272/2008 Void
  · Hazard pictograms Void
  · Signal word Void
  · Hazard statements Void

· Additional information:
  As this product is a medical device in the meaning of Directive 93/42/EEC and intended for use by the end consumer and is applied in an invasive manner or body contact, it is exempt from the labelling requirements according to regulation (EC) 1272/2008.
  EUH210 Safety data sheet available on request.

· 2.3 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: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS: 18282-10-5</th>
<th>tin dioxide</th>
<th>substance with a Community workplace exposure limit 2.5 – 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 242-159-0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 56-81-3</th>
<th>glycerol</th>
<th>substance with a Community workplace exposure limit 2.5 – 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 200-289-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

· 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
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly. Rinse with warm water.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor. Rinse out mouth and then drink plenty of water.

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: Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents: Water with full jet.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective clothing.

6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:
- Pick up mechanically.
- Ensure adequate ventilation.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Observe normal care for working with chemicals.

- Handling: Product is intended for dental use only.
- Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
- Storage: Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.

7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS: 18282-10-5 tin dioxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL Short-term value: 4 mg/m³</td>
</tr>
<tr>
<td>Long-term value: 2 mg/m³</td>
</tr>
<tr>
<td>as Sn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 56-81-5 glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL Long-term value: 10 mg/m³</td>
</tr>
</tbody>
</table>

Regulatory information: WEL: EH40/2018

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures
The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
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 breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

- Form: Pasty
- Colour: Light grey
- Odour: Product specific
- Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition

- Melting point/freezing point: Undetermined
- Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable

Flammability (solid, gaseous) Not determined.

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not self-igniting.

Explosive properties: Product does not present an explosion hazard.
Trade name: Zircate Prophy Paste

- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.

- **Vapour pressure:** Not applicable.

- **Density:** Not determined
  - Relative density
  - Vapour density Not applicable.
  - Evaporation rate Not applicable.

- **Solubility in / Miscibility with Water:** Insoluble

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

- **Viscosity:**
  - dynamic: Not applicable.
  - kinematic: Not applicable.

- **Solvent content:**
  - Organic solvents: 4.9 %
  - Water: 9.9 %

- **Solids content:** 85.0 %

- **9.2 Other information**
  - No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
  - No further relevant information available.

- **10.2 Chemical stability**
  - Thermal decomposition / conditions to be avoided: No decomposition if used 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**
  - No dangerous decomposition products known

### 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 relevant for classification:**
  - CAS: 18282-10-5 tin dioxide
    - Oral LD50 > 20,000 mg/kg (rat)
  - CAS: 56-81-5 glycerol
    - Oral LD50 > 12,600 mg/kg (rat)
    - Dermal LD50 > 18,700 mg/kg (rabbit)

- **Primary irritant effect:**
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Based on available data, the classification criteria are not met.
  - 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.

(Contd. on page 5)
## SECTION 12: Ecological information

### 12.1 Toxicity

**Aquatic toxicity:**

<table>
<thead>
<tr>
<th>CAS: 56-81-5 glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50/24h &gt; 5,000 mg/l (Fish acute toxicity study)</td>
</tr>
<tr>
<td>EC50/24h &gt; 10,000 mg/L (daphnia magna)</td>
</tr>
</tbody>
</table>

### 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.

### Additional ecological information:

- **General notes:**
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

- **Recommendation:** Smaller quantities can be disposed of with household waste.

### European waste catalogue

18 01 06* chemicals consisting of or containing hazardous substances

### Uncleaned packaging:

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

## SECTION 14: Transport information

### 14.1 UN-Number

ADR, IMDG, IATA: **Void**

### 14.2 UN proper shipping name

ADR, IMDG, IATA: **Void**

### 14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA: **Void**

### 14.4 Packing group

ADR, IMDG, IATA: **Void**

### 14.5 Environmental hazards:

Not applicable.

### 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.

### UN "Model Regulation":

**Void**
**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer.

For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

- **Department issuing SDS:** Research & Development
- **Contact:** HotLine for urgent technical support: +49-7531-583-350
- **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
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - 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.