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

- Product identifier
  - Trade name: EndoREZ™ Points
  - Article number: 1631, 1632, 1633, 1675, 3355, 3356
  - Index number: SDS 115-001.05
- Relevant identified uses of the substance or mixture and uses advised against
  - Professional Root Canal Filling Material
- Application of the substance / the mixture
  - Professional Root Canal Filling Material
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    - Ultradent Products Inc.
    - 505 W. Ultradent Drive (10200 S)
    - South Jordan, UT 84095-3942
    - USA
    - onlineordersupport@utradent.com
  - EC Responsible Person
    - Ultradent Products GmbH
    - Am Westhover Berg 30
    - 51149 Cologne Germany
    - Email: infoDe@ultradent.com
    - Emergency Phone: +49(0)2203-35-92-0
  - Further information obtainable from: Customer Service
  - Emergency telephone number:
    - CHEMTREC (NORTH AMERICA) : (800) 424-9300
    - (INTERNATIONAL) : +(703) 527-3887

2 Hazards identification

- Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    - Skin Sens. 1 H317 May cause an allergic skin reaction.
    - Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- Label elements
  - Labelling according to Regulation (EC) No 1272/2008
    - The Regulation EC 1272/2008 on classification, labeling and packaging of substances and mixtures (CLP) shall not apply to a medical device in the finished state used in direct physical contact with the human body according to Art. 1.5 (d). Therefore, the product is exempted from the CLP labeling requirements, and no SDS is required by Regulation 1907/2006, Art. 2 (6c), REACH. Therefore, all given data, classification, and information on this SDS are provided solely on a voluntary basis.
  - Hazard pictograms
    - GHS07
  - Signal word Warning
  - Hazard-determining components of labelling:
    - Benzoyl Peroxide
    - Organophosphate Oxide

(Contd. on page 2)
EndoREZ™ Points

· Hazard statements
  H317 May cause an allergic skin reaction.
  H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  P273 Avoid release to the environment.
  P280 Wear protective gloves.
  P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
  P321 Specific treatment (see on this label).
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Mixtures
  · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Chemical name</th>
<th>Hazard phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-36-0</td>
<td>202-327-6</td>
<td>Benzoyl Peroxide</td>
<td>Org. Perox. B, Aquatic Chronic 1, Eye Irrit. 2, Skin Sens. 1</td>
</tr>
<tr>
<td>108-88-3</td>
<td>203-625-9</td>
<td>Toluene</td>
<td>Flam. Liq. 2, Repr. 2, Aquatic Chronic 2, Skin Irrit. 2, Asp. Tox. 1, STOT SE 3, Aquatic Chronic 3</td>
</tr>
<tr>
<td>162881-26-7</td>
<td>423-340-5</td>
<td>Organophosphine Oxide</td>
<td>Skin Sens. 1, Aquatic Chronic 4</td>
</tr>
</tbody>
</table>

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

· Description of first aid measures
  · After inhalation: Seek medical treatment in case of complaints.
  · After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
    If skin irritation continues, consult a doctor.
  · After eye contact:
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  · After swallowing:
    If swallowed in large quantities seek medical attention.
    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 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents:
  - Foam, dry chemical, carbon dioxide
  Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters:
  - Protective equipment: Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up:
  - Pick up mechanically.
  Dispose contaminated material as waste according to item 13.
- 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.

7 Handling and storage

- Handling:
  - Precautions for safe handling: Avoid release to the environment
  - Information about fire - and explosion protection: 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: See product labelling.
- Specific end use(s) Professional Root Canal Filling Material

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Control parameters
  - Ingredients with limit values that require monitoring at the workplace:
    - 94-36-0 Benzoyl Peroxide
      - WEL (Great Britain) Long-term value: 5 mg/m³
    - 108-88-3 Toluene
      - WEL (Great Britain) Short-term value: 384 mg/m³, 100 ppm
      - Long-term value: 191 mg/m³, 50 ppm

(Contd. on page 4)
Trade name: EndoREZ™ Points

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

- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
  - Respiratory protection:
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- Protection of hands:

  Protective gloves

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 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: Not required.
- Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Solid
      - Colour: Pink
    - Odour: Odourless
    - Odour threshold: Not determined.
  - pH-value: Not applicable.

- Change in condition
  - Melting point/freezing point: 150 °C
  - Initial boiling point and boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gas): Not determined.

- Decomposition temperature: Not determined.

- Auto-ignition temperature: Product is not selfigniting.

- Explosive properties: Product does not present an explosion hazard.
10 Stability and reactivity

- Reactivity: Stable
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: Strong acids, strong bases, and oxidizing agents.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: Zinc
- Hydrocarbons
- Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.

- LD/LC50 values relevant for classification:

  94-36-0 Benzoyl Peroxide
  - Oral LD50 >5,000 mg/kg (rat)
  - LC50 Fish 0.0602 mg/l (Fish) (Toxicity to fish)
  - Inhalative LD50 Inhalation 4hrs 24.3 mg/l (rat) (Testing of Chemicals Acute Toxicity Inhalation)

  108-88-3 Toluene
  - Oral LD50 5,000 mg/kg (rat)
  - Dermal LD50 12,124 mg/kg (rabbit)
  - Inhalative LC50/4 h 5,320 mg/l (mouse)
49.4.3.1

162881-26-7 Organophosphine Oxide

<table>
<thead>
<tr>
<th>Oral</th>
<th>LD50</th>
<th>&gt;2,000 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fish</td>
<td>&gt;0.09 mg/l (Fish) (Toxicity to fish)</td>
<td></td>
</tr>
</tbody>
</table>

- **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**
    May cause an allergic skin reaction.

- **CMR effects (carcinogenicity, 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.

12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:**
    - **94-36-0 Benzoyl Peroxide**
      - Algae Toxicity 0.0711 mg/l (Algae) (Toxicity to algae)
      - 0.11 mg/l (daphnia) (Toxicity to aquatic invertebrates)
    - **162881-26-7 Organophosphine Oxide**
      - EC50 (static) >1.175 mg/kg (daphnia) (Toxicity to aquatic invertebrates)
      - Aqua toxicity 20.008 mg/l (daphnia) (Daphnia Magna Reproduction Test)
      - Toxicity to Aquatic Plants (static) >0.26 mg/l (Plant) (Toxicity to algae)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxical effects:**
  - **Remark:** Harmful to fish
- **Additional ecological information:**
  - **General notes:**
    - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    - Harmful to 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** Do not allow product to reach sewage system.
Trade name: EndoREZ™ Points

- European waste catalogue
  - HP14 Ecotoxic

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

14 Transport information

- UN-Number
  - ADR, ADN, IMDG, IATA: not regulated

- UN proper shipping name
  - ADR, ADN, IMDG, IATA: not regulated

- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: not regulated

- Packing group
  - ADR, IMDG, IATA: not regulated

- Environmental hazards:
  - Not applicable.

- Special precautions for user:
  - Not applicable.

- Transport in bulk according to Annex II of Marpol and the IBC Code:
  - Not applicable.

- UN "Model Regulation": not regulated

15 Regulatory information

- Chemical safety assessment:
  - Device is biocompatible when used as directed by dental professionals per ISO 10993-1

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.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H241 Heating may cause a fire or explosion.
  - H304 May be fatal if swallowed and enters airways.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H336 May cause drowsiness or dizziness.
  - H361d Suspected of damaging the unborn child.
  - H373 May cause damage to organs through prolonged or repeated exposure.
  - H410 Very toxic to aquatic life with long lasting effects.
  - H412 Harmful to aquatic life with long lasting effects.
  - H413 May cause long lasting harmful effects to aquatic life.

- Department issuing SDS: Regulatory Affairs
Trade name: EndoREZ™ Points

- **Contact**: Customer Service
- **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
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Org. Perox. B: Organic peroxides – Type B
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Repr. 2: Reproductive toxicity – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
  - Asp. Tox. 1: Aspiration hazard – Category 1
  - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
  - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
  - Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4