1 Identification

- **Product identifier**
  - **Trade name:** SR Micro Retentionen / SR Macro Retentionen
  
- **Application of the substance / the mixture**
  Auxiliary for manufacture of dental prosthesis

- **Details of the supplier of the safety data sheet**
  
  **Manufacturer/Supplier:**
  Ivoclar Vivadent Inc.
  175 Pineview Drive, Amherst, N.Y. 14228
  USA
  Tel. +1 800 533 6825
  Fax +1 716 691 2285

  Ivoclar Vivadent Inc.
  1-6600 Dixie Road
  Mississauga, Ontario
  L5T 2Y2
  Canada
  Phone: +1 905 670 8499
  Fax: +1 905 670 3102

- **Information department:** Quality Assurance / Regulatory Affairs

- **Emergency telephone number:**
  24 Hour Emergency Assistance:
  Emergency-Call USA - Infotrac: 1-800-535-5053
  Emergency-Call Canada - Canutec: 1-613-996-6666

  General SDS Assistance:
  US: 1-800-533-6825
  Canada: 1-800-263-8182

2 Hazard(s) identification

- **Classification of the substance or mixture**
  The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Void
  
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
  
  **Classification system:**
  
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

  - **HMIS-ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

- **Other hazards**
  Particular danger of slipping on leaked/spilled product.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

(Contd. on page 2)
## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Copolymer
- **Dangerous components:** Void

## 4 First-aid measures

- **Description of first aid measures**
  - **General information:** No special measures required.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Rinse with water.
  - **After eye contact:** Mechanical effects only.
  - **After swallowing:** Rinse out mouth and then drink plenty of water.
  - **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.
  - **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 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:** Pick up mechanically.
- **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**
    - Only adequately trained personnel should handle this product.
    - For use in dentistry only.
  - **Information about protection against explosions and fires:** No special measures required.
8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- 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.
- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
    Wash hands before breaks and at the end of work.
    Usual hygienic measures for dental practice and dental laboratories.
  - Breathing equipment: Not required.
  - 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 break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection: Not required.

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      Form: Solid
      Color: Different according to coloring
      Odor: Odorless
      Odor threshold: Not determined.
    - pH-value: Not applicable.
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- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** 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.

- **Flash point:** Not applicable.

- **Density:**
  - Relative density: Not determined.
  - Vapor 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:**
  - VOC content: 25.4 %

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

## 10 Stability and reactivity

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

- **Chemical stability** Stable under normal handling and storage conditions.

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **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 under normal conditions of storage and use.

## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**
  - on the eye: Mechanical effects only.

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**
  - CAS: 80-62-6 methyl methacrylate
**Trade name:** SR Micro Retentionen / SR Macro Retentionen

<table>
<thead>
<tr>
<th>CAS: 105-74-8</th>
<th>dilaur oyl peroxide</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 13463-67-7</td>
<td>titanium dioxide</td>
<td>2B</td>
</tr>
</tbody>
</table>

- **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.

- **Behavior in environmental systems:**
  - **Bioaccumulative potential:** No further relevant information available.
  - **Mobility in soil:** No further relevant information available.

- **Additional ecological information:**
  - **General notes:** Generally not hazardous for water.

- **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:**
    - Smaller quantities can be disposed of with household waste.
    - Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

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

### 14 Transport information

- **UN-Number**
  - DOT,ADR,RID,ADN,ADN,IMDG,IATA Void

- **UN proper shipping name**
  - DOT,ADR,RID,ADN,ADN,IMDG,IATA Void

- **Transport hazard class(es)**
  - DOT,ADR,RID,ADN,ADN,IMDG,IATA Void

- **Packing group**
  - DOT,ADR,RID,ADN,IMDG,IATA Void

- **Environmental hazards:**
  - **Marine pollutant:** No
Trade name: SR Micro Retentionen / SR Macro Retentionen

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· 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: Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).
· UN "Model Regulation": Void

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.
    · Section 313 (Specific toxic chemical listings):
      CAS: 80-62-6 methyl methacrylate
    · TSCA (Toxic Substances Control Act):
      All ingredients are listed.
  · Proposition 65
    · Chemicals known to cause cancer: None of the ingredients is listed.
    · Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
    · Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
    · Chemicals known to cause developmental toxicity: None of the ingredients is listed.
  · Carcinogenic categories
    · EPA (Environmental Protection Agency)
      CAS: 80-62-6 methyl methacrylate NL
    · TLV (Threshold Limit Value established by ACGIH)
      CAS: 80-62-6 methyl methacrylate A4
      CAS: 13463-67-7 titanium dioxide A4
    · NIOSH-Ca (National Institute for Occupational Safety and Health)
      CAS: 13463-67-7 titanium dioxide
  · GHS label elements Void
  · Hazard pictograms Void
  · Signal word Void
  · Hazard statements Void
  · National regulations:
    · Other regulations, limitations and prohibitive regulations
      This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.

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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Date of preparation / last revision 06/10/2016 / 3

· 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit