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

- **Product identifier**
- **Trade name:** IPS d.SIGN: Dentin, Deep Dentin, Gingiva, Schneide, Margin, Transpa, Effect, Impulse, Bleach
- **CAS Number:** 66402-68-4
- **EC number:** 266-340-9
- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.
- **Application of the substance / the preparation**
  Manufacture of dental prosthesis
  Metal-ceramic
- **Details of the supplier of the safety data sheet**
  **Manufacturer/Supplier:** Ivoclar Vivadent AG
  Bendererstrasse 2
  FL-9494 Schaan
  FÜRSTENTUM LIECHTENSTEIN
  Tel: +423 235 35 35
  Fax: +423 235 33 60
- **Further information obtainable from:**
  Regulatory Affairs
  msds@ivoclarvivadent.com
- **Emergency telephone number:** +423 / 235 33 13

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  The substance is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:** Not applicable.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:** Void
- **Other hazards**
  Dust generation
  Particular danger of slipping on leaked/spilled product.
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Substances
- **CAS No. Description**
  66402-68-4 ceramic materials

(Contd. on page 2)
### 4 First aid measures

<table>
<thead>
<tr>
<th>Description of first aid measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General information:</strong> No special measures required.</td>
</tr>
<tr>
<td><strong>After inhalation:</strong> Supply fresh air; consult doctor in case of complaints.</td>
</tr>
<tr>
<td><strong>In case of unconsciousness place patient stably in side position for transportation.</strong></td>
</tr>
<tr>
<td><strong>After skin contact:</strong> Rinse with water. Generally the product does not irritate the skin.</td>
</tr>
<tr>
<td><strong>After eye contact:</strong> Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Mechanical effects only.</td>
</tr>
<tr>
<td><strong>After swallowing:</strong> Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.</td>
</tr>
<tr>
<td><strong>Information for doctor:</strong> Most important symptoms and effects, both acute and delayed No further relevant information available.</td>
</tr>
<tr>
<td><strong>Indication of any immediate medical attention and special treatment needed</strong> No further relevant information available.</td>
</tr>
</tbody>
</table>

### 5 Firefighting measures

<table>
<thead>
<tr>
<th>Extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Suitable extinguishing agents:</strong> The product is not flammable.</td>
</tr>
<tr>
<td><strong>Special hazards arising from the substance or mixture</strong> No further relevant information available.</td>
</tr>
<tr>
<td><strong>Advice for firefighters</strong></td>
</tr>
<tr>
<td><strong>Protective equipment:</strong> No special measures required.</td>
</tr>
</tbody>
</table>

### 6 Accidental release measures

<table>
<thead>
<tr>
<th>Personal precautions, protective equipment and emergency procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particular danger of slipping on leaked/spilled product.</strong></td>
</tr>
<tr>
<td><strong>Environmental precautions:</strong> No special measures required.</td>
</tr>
<tr>
<td><strong>Methods and material for containment and cleaning up:</strong> Pick up mechanically. Ensure adequate ventilation.</td>
</tr>
<tr>
<td><strong>Reference to other sections</strong></td>
</tr>
<tr>
<td>See Section 7 for information on safe handling.</td>
</tr>
<tr>
<td>See Section 8 for information on personal protection equipment.</td>
</tr>
<tr>
<td>See Section 13 for disposal information.</td>
</tr>
</tbody>
</table>

### 7 Handling and storage

<table>
<thead>
<tr>
<th>Handling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Precautions for safe handling</strong> Only adequately trained personnel should handle this product.</td>
</tr>
</tbody>
</table>
Prevent formation of dust. 
Ensure good ventilation/exhaustion at the workplace. 
**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:** Store only in the original receptacle.
  - **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
  - Keep container tightly sealed.
  - Store in dry conditions.
- **Specific end use(s)** No further relevant information available.

### 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:** Not required.
  - **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**
      - Usual hygienic measures for dental practice.
      - Wash hands before breaks and at the end of work.
      - Keep away from foodstuffs, beverages and feed.
      - Vacuum clean contaminated clothing. Do not blow or brush off contamination.
      - Do not inhale dust / smoke / mist.
  - **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.
  - **Recommended filter device for short term use:** Filter P2
  - **Protection of hands:** Not required.
  - **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.
  - **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:** Safety glasses

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - Form: Powder
    - Colour: According to product specification
  - **Odour:** Odourless
  - **Odour threshold:** Not determined.
Trade name: IPS d.SIGN: Dentin, Deep Dentin, Gingiva, Schneide, Margin, Transpa, Effect, Impulse, Bleach

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH-value</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Undetermined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous)</strong></td>
<td>Product is not flammable.</td>
</tr>
<tr>
<td><strong>Self-igniting</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with water</strong></td>
<td>Insoluble.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

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**
- **Primary irritant effect**
  - on the skin: No irritant effect.
  - on the eye: Mechanical effects only.
- **Sensitization**: No sensitizing effects known.
**Safety data sheet**
*according to 1907/2006/EC, Article 31*

**Printing date**: 16.01.2013  
**Revision**: 16.01.2013  
**Version number**: 4

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**Trade name**: IPS d.SIGN: Dentin, Deep Dentin, Gingiva, Schneide, Margin, Transpa, Effect, Impulse, Bleach

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**12 Ecological information**

- **Toxicity**
  - Aquatic toxicity: No further relevant information available.
  - 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.
- **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.

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**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation**
  Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

**European waste catalogue**

| 08 02 99 | wastes not otherwise specified |

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

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**14 Transport information**

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

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(Contd. on page 6)
**Trade name: IPS d.SIGN: Dentin, Deep Dentin, Gingiva, Schneide, Margin, Transpa, Effect, Impulse, Bleach**

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
  - Other regulations, limitations and prohibitive regulations
    - The product is a medical device according to the EC-directive 93/42/EEC.
  - 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.

- Abbreviations and acronyms:
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organization
  - 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 Harmonized System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)