Material Safety Data Sheet
according to NOHSC:2011(2003)

### 01. Identification of substance, preparation and company

<table>
<thead>
<tr>
<th>Product name</th>
<th>Ivoclar Vivadent IPS Empress Esthetic Veneer Wash</th>
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</thead>
<tbody>
<tr>
<td>Use of the substance</td>
<td>Ceramic</td>
</tr>
<tr>
<td>Preparation</td>
<td></td>
</tr>
<tr>
<td>Manufacturer/Supplier</td>
<td>Ivoclar Vivadent AG</td>
</tr>
<tr>
<td>Street/P.O.Box</td>
<td>Bendererstrasse 2, FL -9494 Schaan</td>
</tr>
<tr>
<td>Country code/Postal</td>
<td>Fürstentum Liechtenstein</td>
</tr>
<tr>
<td>code/Town/City</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>+(716) 691-0010</td>
</tr>
<tr>
<td>Telexfax</td>
<td>+423 / 235 35 35 or 373 40 40</td>
</tr>
<tr>
<td>Distributor</td>
<td>Ivoclar Vivadent P/L (Australia), 1-5 Overseas Drive, Noble Park</td>
</tr>
<tr>
<td></td>
<td>North, Victoria 3174</td>
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<tr>
<td></td>
<td>Phone No.: +61 3 9795 9599, Tele fax No.: +61 3 9795 9645</td>
</tr>
</tbody>
</table>

### 02. Hazards identification

**Statement of Hazardous Nature**
This product is not classified as: Hazardous according to criteria of National Occupational Health and Safety Commission. Non-Dangerous Goods according to ADG.

**Hazard designation**

- Classification : Not classified
- ADG Classification: not classified
- UN Number: not classified

**Particular information pertaining specific risk for human and environment**
None, if handled according to order.

### 03. Composition/information on ingredients

**Chemical characterization**;
Paste made of 70% Ceramic powder and pigments 30% Glycole

**Hazardous components**
- Grinding Dust

**Other ingredients determined not be hazardous**
- Non hazardous ingredients
- None if used in accordance with instructions

### 04. First-aid measures

**General**
During mixing it is recommended to apply local exhaust ventilation. Immediately remove all contaminated clothing.

**After inhalation**
Let in fresh air. Call a doctor, should the air passages be affected.

**After skin contact**
Flush with plenty of water.

**After eye contact**
Flush with plenty of water (10 - 15 min.). Contact a doctor immediately.

**After ingestion**
Drink plenty of water. Do not induce vomiting. Contact a doctor immediately.
05. Fire-fighting measures
While burning it produces carbon dioxide and carbon monoxide.

Suitable extinguishing media
Not combustible under normal conditions. Adapt extinguishing measures to suit the environment.

Unsuitable extinguishing media
Waterjet. Do not use direct water stream.

Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged
None known

Special protective equipment
When extinguishing fires, use breathing apparatus with an independent source of air.

06. Accidental release measures
Personal precautions
Wear suitable protective clothing, gloves and eye/face protection. Respiratory protection Do not breathe vapour. In dusty atmospheres, use an approved dust respirator. Respiratory Protection. Avoid inhalation of dust while grinding.

Environmental precautions
Prevent from flowing into surface water/ground water.

Methods for cleaning up/collecting
Take up with a mechanical source and proceed according to the waste disposal regulations.

Additional information
Remove according to regulations.

07. Handling and storage
Information for safe handling
Containers to be opened and handled with care. Make sure that ventilation is adequate. Only adequately trained personnel should handle this product. Keep out of reach of children.

Information about protection against explosions and fires
No anti-explosion measures necessary.

Requirements to be met by storerooms and containers
Keep only in the original container. Store at 12-28 °C. Store in a dry place.

Information about separation of incompatible products
Store the foodstuffs separately. Sensitive to cold below < 2 °C

08. Exposure controls and personal protection
Producer Industry recommends an exposure limit of 1.5 mg/m3.

Additional information about engineering measures
No particular measures required. Technical measures Provide adequate local ventilation. Control airborne concentration below the exposure guideline. Dust exposure limit: 1.5 mg/m3. Control airborne concentration below the exposure guideline.

Components with critical values that require monitoring at the workplace (exposure limits)
Dust and Vapours Vapour pressure not applicable (20°C)
Specification : TWA (AUS)
Value : MAK 0.0 mg/m³

Personal protective equipment
Do not eat or drink during work - no smoking. Keep away from food, drink and animal feeding stuff. Avoid contact with skin and eyes. Respiratory protection In dusty atmospheres, use an approved dust respirator P2. If metal fumes are present, use an approved high-efficiency particulate respirator (P3).

Respiratory protection
Provide for good ventilation. Respiratory protection Respiratory Protection. Avoid inhalation of dust while grinding. In dusty atmospheres, use an approved dust respirator

Hand protection
Short-term exposure (< 30 min): disposable gloves, e.g. nitrile rubber, material thickness 0.1 mm (Australian Standard 2161).
Long-term exposure (Level 6: < 480 min): protective gloves, e.g. nitrile rubber, material thickness 0.7 mm (Australian Standard 2161).

**Eye protection**
Use tightly fitting safety glasses (Australian Standard AS 1336 and AS/NZS 1337).

**Body protection**
No particular measures required.

### 09. Physical and chemical properties

#### Image
- **Form:** Paste
- **Colour:** different
- **Odour:** odourless

#### Relevant safety data
- **Melting point / range:** (1013 hPa) not applicable °C
- **Casting point / range:** (1013 hPa) ca. not applicable °C
- **Flash point:** >200 °C DIN 51755
- **Ignition temperature:** not applicable °C
- **Lower explosion limit:** not applicable % b.v.
- **Upper explosion limit:** not applicable % b.v.
- **Density:** not applicable g/cm³
- **Solubility in water:** (20 °C) Partially miscible % b.w.
- **pH value:** not applicable

### 10. Stability and reactivity

#### Conditions to avoid
None, if handled according to order.

#### Materials to avoid
None known.

#### Hazardous decomposition products
None if used in accordance with instructions.

### 11. Toxicological information

#### Toxicological tests
No adverse effects anticipated by this route of exposure incidental to proper industrial handling

#### Primary irritant effect
Prolonged or repeated exposure may cause drying or irritation of the skin

#### Sensitization
No data available.

#### Experience on practice
No data available

### 12. Ecological information

#### No ecological problems to be anticipated if properly handled and used.

#### Details on elimination (persistence / degradability)

#### Abiotic elimination
No data available.

#### Biological degradation / elimination
No data available.

#### Fate in environmental compartments
There are no data available on the preparation itself.

#### Ecotoxic effects
Performance in sewage-treatment plants
No ecological problems to be anticipated if properly handled and used.

13. Disposal considerations
   
   **Product**
   EU waste key 02.08.09
   Concentrate: The cleaned-up material must be disposed of in accordance with Federal, State or Local regulations.

   **Contaminated packaging**
   Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant.
   Un cleaned packaging must be disposed of in the same manner as the medium.

14. Transport information
   Product is not classified for any mode of transportation
   
   **Land transport ADG**
   Classification
   Class : ADR RID

   **Maritime transport IMDG**
   Classification
   IMDG-Code :
   - EMS UN Number
   - Packing Group
   - MFAG

   **Air transport ICAO-TI and IATA-DGR**
   Classification
   Class :
   - ICAO / IATA-DGR
   - UN ICAO / IATA-DGR
   - Proper shipping name
   - UN Number

15. Regulatory information
   
   **Classification**
   This product does not require classification according to the criteria of the EC. The product is a medical device according to the EC-directive 93/42

   **Danger symbol and danger designation**
   Not required.

   **Hazard-determining components of labelling**
   None : MAK value 0.0 mg/m³ ml/m³ (ppm)

   **R-phrases**
   43 May cause sensitisation by skin contact.
   36/37/38 Irritating to eyes, respiratory system and skin.

   **S-phrases**
   37/39 Wear suitable gloves and eye/face protection.
   26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16. Other information
   
   **Processing instructions / technical data sheets**
   Please observe the label/directions for use!

   **Further information**
   This is a medical device classified under the requirements of EU and TGA. Complies with ISO 8891, ISO 9693

   **Contact**
   Dr. Peter Lobo
Material Safety Data Sheet
according to NOHSC:2011(2003)

Product name: Ivoclar Vivadent IPS Empress Esthetic Veneer Wash
Statement of Hazardous Nature: This product is classified as: Non Hazardous according to criteria of National Occupational Health and Safety Commission.
Revision: 10.11.2009
Version: 1.0.0
Print date: 10.11.2009

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.