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

- **1.1 Product identifier**
  - Trade name: Laser Ceramic White

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
  - **Application of the substance / the mixture**
    - Manufacture of dental prosthesis
    - Dental alloy

- **1.3 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
  - Further information obtainable from: Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein
    - Regulatory Affairs
    - sds@ivoclarvivadent.com
  - **1.4 Emergency telephone number:** +423 / 235 33 13 (Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein)

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  - Classification according to Regulation (EC) No 1272/2008
    - Ox. Sol. 2 H272 May intensify fire; oxidiser.

- **2.2 Label elements**
  - Labelling according to Regulation (EC) No 1272/2008
    - The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**
  - GHS03

- **Signal word** Danger

- **Hazard statements**
  - H272 May intensify fire; oxidiser.

- **Precautionary statements**
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P221 Take any precaution to avoid mixing with combustibles.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P220 Keep/Store away from clothing/combustible materials.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**
  - Alloys do not require a label, providing they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
Trade name: Laser Ceramic White

· vPvB: Not applicable.

*SECTION 3: Composition/information on ingredients*

· 3.2 Chemical characterisation: Mixtures
  · Description: Dental alloy
  · Dangerous components:
    | CAS       | EINECS      | Substance                                      | Concentration |
    |-----------|-------------|-----------------------------------------------|---------------|
    | 7440-22-4 | 231-131-3  | Silver substance with a Community workplace exposure limit | 10-<25%       |
  · Additional information: For the wording of the listed risk phrases refer to section 16.

*SECTION 4: First aid measures*

· 4.1 Description of first aid measures
  · General information: No special measures required.
  · After inhalation:
    Grinding dust: Supply fresh air; consult doctor in case of complaints.
    In case of unconsciousness place patient stably in side position for transportation.
  · After skin contact:
    After contact with the molten product, cool rapidly with cold water.
    If skin irritation continues, consult a doctor.
  · After eye contact:
    Grinding dust: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
    Mechanical effects only.
  · After swallowing:
    Seek medical treatment.

· 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.

· 5.2 Special hazards arising from the substance or mixture
  No further relevant information available.

· 5.3 Advice for firefighters
  · Protective equipment: Do not inhale explosion gases or combustion gases.

*SECTION 6: Accidental release measures*

· 6.1 Personal precautions, protective equipment and emergency procedures
  Not required.

· 6.2 Environmental precautions:
  No special measures required.
  Do not allow to enter sewers/surface or ground water.

· 6.3 Methods and material for containment and cleaning up:
  Pick up mechanically.

· 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**
  Extractors are required on all machines used for thermal processing or splinter removal processes.

- **7.2 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:** Store away from flammable substances.
  - **Further information about storage conditions:** None.

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

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**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>Ingredient</th>
<th>WEL Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-22-4 silver</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

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

- **8.2 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.

  - **Respiratory protection:** Use respiratory protective device against the effects of fumes/dust/aerosol.

  - **Protection of hands:**
    Protective gloves should always be worn during mechanical and thermal processing.
    After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

  - Mechanical processing:
    - Leather gloves
  - Strong material gloves
  - Thermal processing:
    - Heat protection gloves

- **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:**

  Always wear safety goggles during mechanical processing (grinding, sawing /cutting, drilling, milling).
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information
  - Appearance:
    - Form: Solid
    - Colour: Grey
    - Odour: Odourless
    - Odour threshold: Not determined.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/Melting range: 1200 - 1290 °C
    - Boiling point/Boiling range: Undetermined.
  - Flash point: Not applicable.
  - Flammability (solid, gaseous): Not determined.
  - Self-igniting: Product is not self-igniting.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapour pressure: Not applicable.
  - Density: Not determined.
  - Relative density: Not determined.
  - 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.

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
  - Stable under normal handling and storage conditions.

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

10.4 Conditions to avoid
  - No further relevant information available.

10.5 Incompatible materials
  - No further relevant information available.

10.6 Hazardous decomposition products
  - None under normal conditions of storage and use.
SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Mechanical effects only.
- Sensitisation: No sensitising effects known.
- Additional toxicological information:
  Fumes or dusts generated from cutting or grinding operations may cause respiratory irritation.

SECTION 12: Ecological information

12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 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:
    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.
  - 12.5 Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - 12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
- Recommendation
  Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
- ADR, ADN, IMDG, IATA: Void

14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA: Void

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA: Void

14.4 Packing group
- ADR, IMDG, IATA: Void
Trade name: Laser Ceramic White

- **14.5 Environmental hazards:**
  - Marine pollutant: No

- **14.6 Special precautions for use**
  - Not applicable.

- **14.7 Transport in bulk according to Annex II of MARPOL 73/78 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":**
  - -

**SECTION 15: Regulatory information**

- **15.1 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 Directive 93/42/EEC.

- **15.2 Chemical safety assessment:**
  - A Chemical Safety Assessment has not been carried out.

**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.

- **Relevant phrases**
  - H252 Self-heating in large quantities; may catch fire.
  - H272 May intensify fire; oxidiser.

- **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)
  - Ox. Sol. 2: Oxidising Solids, Hazard Category 2

- **Data compared to the previous version altered.**