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

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

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - **Application of the substance / the mixture**
    - Manufacture of dental prothesis
    - 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 Yellow

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
- Description: Dental alloy
- Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Chemical</th>
<th>Content</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-06-4</td>
<td>231-116-1</td>
<td>platinum Ox. Sol. 2, H272</td>
<td>3-&lt;10%</td>
<td></td>
</tr>
<tr>
<td>7440-05-3</td>
<td>231-115-6</td>
<td>palladium Self-heat. 2, H252; Ox. Sol. 2, H272</td>
<td>3-&lt;10%</td>
<td></td>
</tr>
<tr>
<td>7440-22-4</td>
<td>231-131-3</td>
<td>silver substance with a Community workplace exposure limit</td>
<td>3-&lt;10%</td>
<td></td>
</tr>
</tbody>
</table>

- 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.

- 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.
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.

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:
  - 7440-06-4 platinum
    - WEL Long-term value: 5 mg/m³
  - 7440-22-4 silver
    - WEL Long-term value: 0.1 mg/m³
- 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: 1085 - 1215 °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.
   - 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 Possibility of hazardous reactions
    - No hazardous reactions known.
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.
- Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- 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.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 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 Yellow

<table>
<thead>
<tr>
<th>14.5 Environmental hazards:</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td>Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>-</td>
</tr>
</tbody>
</table>

**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.