1 Identification

- Product identifier
  Trade name: Laser Ceramic Yellow

- 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

- 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
  Ox. Sol. 2 H272 May intensify fire; oxidizer.

- Label elements
  GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms

  GHS03

  Signal word Danger
  Hazard statements
  May intensify fire; oxidizer.
  Precautionary statements
  Keep away from heat.
  Take any precaution to avoid mixing with combustibles.

(Contd. on page 2)
Trade name: Laser Ceramic Yellow

Wear protective gloves / eye protection / face protection. Keep/Store away from clothing/combustible materials. In case of fire: Use for extinction: CO2, powder or water spray. 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.

Classification system:
- NFPA ratings (scale 0 - 4)

\[
\begin{align*}
\text{Health} &= 0 \\
\text{Fire} &= 3 \\
\text{Reactivity} &= 0
\end{align*}
\]

- HMIS-ratings (scale 0 - 4)

\[
\begin{align*}
\text{Health} &= 0 \\
\text{Fire} &= 3 \\
\text{Reactivity} &= 0
\end{align*}
\]

<table>
<thead>
<tr>
<th>Other hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of PBT and vPvB assessment</td>
</tr>
<tr>
<td>PBT: Not applicable.</td>
</tr>
<tr>
<td>vPvB: Not applicable.</td>
</tr>
</tbody>
</table>

### 3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Dental alloy
- Dangerous components:

<table>
<thead>
<tr>
<th>Chemical Code</th>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-06-4</td>
<td>platinum</td>
<td>2.5-&lt;10%</td>
</tr>
<tr>
<td>7440-05-3</td>
<td>palladium</td>
<td>2.5-&lt;10%</td>
</tr>
<tr>
<td>7440-22-4</td>
<td>silver</td>
<td>2.5-&lt;10%</td>
</tr>
<tr>
<td>7440-74-6</td>
<td>indium</td>
<td>1-&lt;2.5%</td>
</tr>
</tbody>
</table>

### 4 First-aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation:
  Grindng 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.
- Information for doctor:
  Most important symptoms and effects, both acute and delayed No further relevant information available.
**Trade name:** Laser Ceramic Yellow

- **Indication of any immediate medical attention and special treatment needed**
  No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
  - Special hazards arising from the substance or mixture: No further relevant information available.

- **Advice for firefighters**
  - Protective equipment: Do not inhale explosion gases or combustion gases.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

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

- **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
  - Extractors are required on all machines used for thermal processing or splinter removal processes.
  - Information about protection against explosions and fires: No special measures required.

- **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.

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

### 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:**

<table>
<thead>
<tr>
<th>7440-06-4 platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL: Long-term value: 0.002 mg/m³ (soluble salts, as Pt)</td>
</tr>
<tr>
<td>REL: Long-term value: 1* 0.002** mg/m³ (Metal **soluble salts, as Pt)</td>
</tr>
<tr>
<td>TLV: Long-term value: 1* 0.002** mg/m³ (metal **soluble salts, as Pt)</td>
</tr>
</tbody>
</table>

*(Contd. on page 4)*
7440-22-4 silver

PEL Long-term value: 0.01 mg/m³
REL Long-term value: 0.01 mg/m³
TLV Long-term value: 0.1 mg/m³
   metal: dust and fume

7440-74-6 indium

REL Long-term value: 0.1 mg/m³
   as In
TLV Long-term value: 0.1 mg/m³
   as In

· Additional information: The lists that were valid during the creation 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.
   · Breathing equipment: 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 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).

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
   · Appearance:
      Form: Solid
      Color: Grey
   · Odor: Odorless
   · Odour threshold: Not determined.
· pH-value: Not applicable.
· Change in condition
   Melting point/Melting range: 1085 - 1215 °C (1985 - 2219 °F)
   Boiling point/Boiling range: Undetermined.
· Flash point: Not applicable.
· Flammability (solid, gaseous): Not determined.
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.
  - **Additional toxicological information:**
    Fumes or dusts generated from cutting or grinding operations may cause respiratory irritation.

- **Carcinogenic categories**
  - **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:**
    - Water hazard class 1 (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.

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:**
    - 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

<table>
<thead>
<tr>
<th>DOT</th>
<th>ADR, ADN, IMDG, IATA</th>
</tr>
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<tbody>
<tr>
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<td>NA3077</td>
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<tr>
<td>DOT</td>
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<tr>
<td>UN proper shipping name</td>
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<td>ADR, ADN, IMDG, IATA</td>
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<td>Transport hazard class(es)</td>
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<tr>
<td>DOT</td>
<td>9 Miscellaneous dangerous substances and articles</td>
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<tr>
<td>Class</td>
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<tr>
<td>Label</td>
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<tr>
<td>Class</td>
<td>Void</td>
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<tr>
<td>Packing group</td>
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<tr>
<td>DOT</td>
<td>III</td>
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<tr>
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<td>Environmental hazards:</td>
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<tr>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
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):
      7440-22-4 silver
      7440-50-8 copper
    - TSCA (Toxic Substances Control Act):
      7440-57-5 Gold
      7440-22-4 silver
      7440-50-8 copper
      7440-06-4 platinum
      7440-74-6 indium
      7439-88-5 iridium
  - 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)
      7440-22-4 silver D
      7440-50-8 copper D
    - TLV (Threshold Limit Value established by ACGIH)
      None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: Laser Ceramic Yellow

- **Hazard pictograms**

![GHS03](image)

- **Signal word** Danger
- **Hazard statements**
  May intensify fire; oxidizer.
- **Precautionary statements**
  Keep away from heat.
  Take any precaution to avoid mixing with combustibles.
  Wear protective gloves / eye protection / face protection.
  Keep/Store away from clothing/combustible materials.
  In case of fire: Use for extinction: CO2, powder or water spray.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
  The product is a medical device according to the Directive 93/42/EEC.
  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.

- **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** 06/24/2015 / 4
- **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)
  Ox. Sol. 2: Oxidising Solids, Hazard Category 2

* Data compared to the previous version altered.