1 Identification of the substance or mixture and of the supplier

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

- **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 prothesis
  - 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

  - **Importer:**
    - Ivoclar Vivadent Ltd.
    - 12 Omega St, Rosedale, Auckland
    - New Zealand
    - Tel: + 64 9 914 9999 / Fax: + 64 9 914 9990

- **Further information obtainable from:**
  - Regulatory Affairs
  - sds@ivoclarvivadent.com
  - **Emergency telephone number:** 0800 764 766 (National Poison Centre - 24 hours / 7 days)

2 Hazards identification

- **Classification of the substance or mixture**
  - Ox. Sol. 2  H272  May intensify fire; oxidiser.
  - Acute Tox. 5  H333  May be harmful if inhaled.

- **Label elements**
  - **GHS label elements**
    - The product is classified and labelled according to the Globally Harmonised System (GHS).

- **Hazard pictograms**
  - GHS03

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - iron

- **Hazard statements**
  - May intensify fire; oxidiser.
  - May be harmful if inhaled.

- **Precautionary statements**
  - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - Keep/Store away from clothing/combustible materials.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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.

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/Information on ingredients

Chemical characterisation: Mixtures
Description: Dental alloy

Dangerous components:
CAS: 7440-06-4
EINECS: 231-116-1
Platinum Ox. Sol. 2, H272 10-25%

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: Grinding dust: Supply fresh air; consult doctor in case of complaints.
After skin contact: After contact with the molten product, cool rapidly with cold water.
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.
Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
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 extinguishing methods suitable to surrounding conditions.
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
Wear protective equipment. Keep unprotected persons away.
Environmental precautions: No special measures required.
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.
7 Handling and storage

handling:

precautions for safe handling
Extractors are required on all machines used for thermal processing or splinter removal processes.
Only adequately trained personnel should handle this product.
For use in dentistry only.

information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

exercise:

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: None.

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:

CAS: 7440-06-4 platinum

WES Long-term value: 1* 0.002** mg/m³
*metal;**soluble salts, as Pt: sen

additional information: The lists valid during the making were used as basis.

exposure controls

personal protective equipment:

general protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Usual hygienic measures for dental practice and dental laboratories.

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.

Protective gloves (EN 374)

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
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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.
9 Physical and chemical properties

- **Eye protection:**
  Always wear safety goggles during mechanical processing (grinding, sawing/cutting, drilling, milling).
  Tightly sealed goggles (EN 166)

<table>
<thead>
<tr>
<th><strong>9 Physical and chemical properties</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td>Form: Solid</td>
</tr>
<tr>
<td>Colour: Grey</td>
</tr>
<tr>
<td>Odour: Odourless</td>
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<tr>
<td>Odour threshold: Not determined.</td>
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<tr>
<td><strong>pH-value:</strong> Not applicable.</td>
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<tr>
<td>Not determined.</td>
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<tr>
<td><strong>Change in condition</strong></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
</tr>
<tr>
<td>Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range: Undetermined.</td>
</tr>
<tr>
<td><strong>Flash point:</strong> Not applicable.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
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<tr>
<td>Contact with combustible material may cause fire.</td>
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<tr>
<td><strong>Decomposition temperature:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature:</strong> Product is not self-igniting.</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong> Product does not present an explosion hazard.</td>
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<tr>
<td><strong>Explosion limits:</strong></td>
</tr>
<tr>
<td>Lower: Not determined.</td>
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<tr>
<td>Upper: Not determined.</td>
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<tr>
<td><strong>Vapour pressure:</strong> Not applicable.</td>
</tr>
<tr>
<td><strong>Density:</strong> Not determined.</td>
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<tr>
<td><strong>Relative density</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Vapour density</strong> Not applicable.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong> Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with water:</strong> Insoluble.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong> Dynamic: Not applicable.</td>
</tr>
<tr>
<td>Kinematic: Not applicable.</td>
</tr>
<tr>
<td>Other information 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.
11 Toxicological information

- Information on toxicological effects
- Additional toxicological information:
  Fumes or dusts generated from cutting or grinding operations may cause respiratory irritation.

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: Not hazardous for water.
- 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
  Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  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.

14 Transport information

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

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Trade name: Laser Ceramic Yellow PdF

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- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user: Not applicable.

- Transport in bulk according to Annex II of Marpol 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": Void

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - New Zealand Inventory of Chemicals
    All ingredients are listed.

- GHS label elements
  The product is classified and labelled according to the Globally Harmonised System (GHS).

- Hazard pictograms

  GHS03

- Signal word Danger

- Hazard-determining components of labelling:
  - iron

- Hazard statements
  May intensify fire; oxidiser.
  May be harmful if inhaled.

- Precautionary statements
  Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  Keep/Store away from clothing/combustible materials.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

- Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.

- Seveso category P8 OXIDISING LIQUIDS AND SOLIDS

- Qualifying quantity (tonnes) for the application of lower-tier requirements: 50 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements: 200 t

- National regulations:
  - Other regulations, limitations and prohibitive regulations
    The product is a medical device according to the 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.
Relevant phrases
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
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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Ox. Sol. 2: Oxidizing solids – Category 2
Acute Tox. 5: Acute toxicity – Category 5