1 Identification

- **Product identifier**
- **Trade name:** HGPKF 1030Y
- **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**
The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

- **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)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS

Printing date 06/23/2015  Reviewed on 05/08/2015

Version number 4

Trade name: HGPKF 1030Y

- HMIS-ratings (scale 0 - 4)
  - Health = 0
  - Fire = 0
  - Reactivity = 0
- Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Dental alloy
- Dangerous components:
  - 7440-22-4 silver 25-50%
  - 7440-66-6 zinc powder -zinc dust (stabilized) 0.25-<1%

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.
    - 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.
  - 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: The product is not flammable.
- 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.
Trade name: HGPKF 1030Y

- **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:** 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 systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL</th>
<th>Long-term value: 0.01 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-22-4 silver</td>
<td>REL</td>
<td>Long-term value: 0.01 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TLV</td>
<td>Long-term value: 0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>metal: dust and fume</td>
</tr>
</tbody>
</table>

- **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

(Contd. on page 4)
Trade name: HGPKF 1030Y

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Solid
      - Color: Gold colored
    - Odor:
      - Odor: Odorless
      - Odor threshold: Not determined.
  - pH-value: Not applicable.

- Change in condition
  - Melting point/Melting range: 1015 - 1040 °C (1859 - 1904 °F)
  - Boiling point/Boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not determined.

- Auto igniting: Product is not selfigniting.

- Danger of explosion: Product does not present an explosion hazard.

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapor pressure: Not applicable.

- Density:
  - 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.

- Other information No further relevant information available.

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.

(Contd. on page 5)
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

- UN-Number
  - NA3077

(Contd. on page 6)
## 40.1.5\(^{\text{contd.}}\)

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
<th>Marine pollutant:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td>-</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

- **TSCA (Toxic Substances Control Act):**
  
  - 7440-22-4 silver

#### 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.
**Trade name:** HGPKF 1030Y

(Contd. of page 6)

<table>
<thead>
<tr>
<th>Carcinogenic categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>· EPA (Environmental Protection Agency)</td>
</tr>
<tr>
<td>7440-22-4 silver D</td>
</tr>
<tr>
<td>7440-66-6 zinc powder-zinc dust (stabilized) D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TLV (Threshold Limit Value established by ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

| NIOSH-Ca (National Institute for Occupational Safety and Health) |
|-----------------------------------------------------------------
| None of the ingredients is listed. |

<table>
<thead>
<tr>
<th>GHS label elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Void</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Void</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal word</th>
</tr>
</thead>
<tbody>
<tr>
<td>Void</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Void</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National regulations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Other regulations, limitations and prohibitive regulations</td>
</tr>
<tr>
<td>The product is a medical device according to the Directive 93/42/EEC.</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical safety assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Chemical Safety Assessment has not been carried out.</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Date of preparation / last revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/23/2015 / 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abbreviations and acronyms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>IMDG: International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>DOT: US Department of Transportation</td>
</tr>
<tr>
<td>IATA: International Air Transport Association</td>
</tr>
<tr>
<td>ACGIH: American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>EINECS: European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS: European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS: Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>NFPA: National Fire Protection Association (USA)</td>
</tr>
<tr>
<td>HMIS: Hazardous Materials Identification System (USA)</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.