1 Identification

- **Product identifier**
  - **Trade name:** Academy Gold XH

- **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

- **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)
Trade name: Academy Gold XH

- HMIS-ratings (scale 0 - 4)
  - HEALTH Health = 0
  - FIRE Fire = 0
  - REACTIVITY 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:
<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-22-4 silver</td>
<td>10-&lt;25%</td>
</tr>
<tr>
<td>7440-50-8 copper</td>
<td>≤10%</td>
</tr>
<tr>
<td>7440-06-4 platinum</td>
<td>2.5-&lt;10%</td>
</tr>
<tr>
<td>7440-31-9 tin</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:
    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.
  - 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.
- Environmental precautions: No special measures required.
7 Handling and storage

- Handling:
  - Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace.
  - 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

  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

  7440-50-8 copper
  PEL Long-term value: 1* 0.1** mg/m³
  as Cu *dusts and mists **fume
  REL Long-term value: 1* 0.1** mg/m³
  as Cu *dusts and mists **fume
  TLV Long-term value: 1* 0.2** mg/m³
  *dusts and mists; **fume; as Cu

  7440-06-4 platinum
  PEL Long-term value: 0.002 mg/m³
  soluble salts, as Pt
  REL Long-term value: 1* 0.002** mg/m³
  *Metal **soluble salts, as Pt
  TLV Long-term value: 1* 0.002** mg/m³
  *metal **soluble salts, as Pt

  7440-31-5 tin
  PEL Long-term value: 2 mg/m³
  metal
  REL Long-term value: 2 mg/m³
  TLV Long-term value: 2 mg/m³
### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form: Solid</td>
</tr>
<tr>
<td>Color: Yellow</td>
</tr>
<tr>
<td>Odor: Odorless</td>
</tr>
<tr>
<td>Odour threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: 860 – 925 °C (1580 – 1697 °F)</td>
</tr>
<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>Flash point: Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous): Not determined.</td>
</tr>
<tr>
<td>Auto igniting: Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion: Product does not present an explosion hazard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosion limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
<tr>
<td>Vapor pressure: Not applicable.</td>
</tr>
</tbody>
</table>

| Density at 20 °C (68 °F): 15.6 g/cm³ (130.182 lbs/gal) |
| Relative density Not determined.                       |
| Vapour density Not applicable.                         |
| Evaporation rate Not applicable.                       |

| Solubility in / Miscibility with Water: Insoluble.     |
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**: No further relevant information available.
  - **Primary irritant effect**:
    - **on the skin**: No irritant effect.
    - **on the eye**: No irritating effect.
  - **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**: Generally not hazardous for water
  - **Results of PBT and vPvB assessment**
    - **PBT**: Not applicable.
    - **vPvB**: Not applicable.
Trade name: Academy Gold XH

· 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
  · DOT Void
  · ADR, ADN, IMDG, IATA Void
· UN proper shipping name Void
  · ADR, ADN, IMDG, IATA Void
· Transport hazard class(es)
  · DOT
  · Class 9 Miscellaneous dangerous substances and articles
  · Label 9
  · ADR, ADN, IMDG, IATA Void
· Class Void
· Packing group
  · DOT Void
  · ADR, IMDG, IATA Void
· Environmental hazards:
  · Marine pollutant: No
· Special precautions for user Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 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": -

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

(Contd. on page 7)
40.1.5

· 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)

  · GHS label elements Void
  · Hazard pictograms Void
  · Signal word Void
  · Hazard statements Void

· 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 06/23/2015 / 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) |

* Data compared to the previous version altered.