1 Identification

- **Product identifier**
  - **Trade name**: HGPKF 1015 Y

- **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

  - **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: HGPKF 1015 Y

- 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%
  - 7440-06-4 platinum 1-<2.5%
  - 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.

- 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 1015 Y

- **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:**
    
    | 7440-22-4 silver |
    |------------------|
    | PEL  | Long-term value: 0.01 mg/m³  |
    |      | metal and soluble compounds (as Ag) |
    | REL  | Long-term value: 0.01 mg/m³  |
    | TLV  | Long-term value: 0.1 mg/m³   |
    |      | metal: dust and fume         |

    | 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 |

- **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

- **General Information**

- **Appearance**:
  - Form: Solid
  - Color: Gold colored
  - Odor: Odorless
  - Odor threshold: Not determined

- **pH-value**: Not applicable.

- **Change in condition**
  - Melting point/Melting range: 975 - 1035 °C (1787 - 1895 °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**: 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.

- **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.
- 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.
Trade name: HGPKF 1015 Y

• Uncleaned packagings:
  • Recommendation: Disposal must be made according to official regulations.

14 Transport information

• UN-Number
  • DOT
  • ADR, ADN, IMDG, IATA

• UN proper shipping name
  • ADR, ADN, IMDG, IATA

• Transport hazard class(es)
  • DOT
  • Class
  • Label

• ADR, ADN, IMDG, IATA
  • Class

• Packing group
  • DOT
  • ADR, IMDG, IATA

• Environmental hazards:
  • Marine pollutant:

• Special precautions for user
  • Not applicable.

• Transport in bulk according to Annex II of MARPOL 73/78 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

• TSCA (Toxic Substances Control Act):
  • 7440-22-4 silver
  • 7440-06-4 platinum

• Proposition 65
  • Chemicals known to cause cancer:
    • None of the ingredients is listed.
**Trade name: HGPKF 1015 Y**

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**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.