

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 04/01/2010

Reviewed on 04/01/2010

## 1 Identification of substance

- **Product details**
- **Trade name:** Porta OP Lot M-1, Porta OP Lot W-2
- **Application of the substance / the preparation**  
Precious metall alloy for dental technology  
Hard solder
- **Manufacturer/Supplier:**  
Wieland Dental + Technik GmbH & Co.KG  
Schwenninger Str. 13  
75179 Pforzheim  
Telefon + 49 (07231)-37050, Telefax + 49 (07231)-357959
- **Information department:** Abteilung Umweltschutz
- **Emergency information:**  
+49 (07231)-37050  
( Be kindly advised that this number can only be contacted at usual office hours.)

## 2 Composition/Data on components

- **Chemical characterization**
- **Description:** Metal in compact form.

- **Dangerous components:**

|           |          |        |
|-----------|----------|--------|
| 7440-22-4 | silver   | 10-25% |
| 7440-06-4 | platinum | ≤ 1%   |

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 3 Hazards identification

- **Hazard description:** Not applicable.
- **Information pertaining to particular dangers for man and environment:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**



- **WHMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |

- **GHS label elements** Void
- **Additional information:** In compact form is this alloy not dangerous for human or the aquatic environment.

## 4 First aid measures

- **After inhalation:** 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:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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- **After swallowing:** Seek immediate medical advice.

## 5 Fire fighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Pick up mechanically. Dispose contaminated material as waste according to item 13.

## 7 Handling and storage

- **Handling:**
- **Information 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.
- **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.

## 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

### 7440-22-4 silver

|     |                        |
|-----|------------------------|
| PEL | 0.01 mg/m <sup>3</sup> |
| REL | 0.01 mg/m <sup>3</sup> |
| TLV | 0.1 mg/m <sup>3</sup>  |
|     | metal                  |

### 7440-06-4 platinum

|     |   |
|-----|---|
| PEL | 0.002 mg/m <sup>3</sup><br>soluble salts, as Pt               |
| REL | 1* 0.002** mg/m <sup>3</sup><br>*Metal **soluble salts, as Pt |
| TLV | 1* 0.002** mg/m <sup>3</sup><br>*metal **soluble salts, as Pt |

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

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- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses

## 9 Physical and chemical properties

- **General Information**

|               |          |
|---------------|----------|
| <b>Form:</b>  | Solid    |
| <b>Color:</b> | Yellow   |
| <b>Odor:</b>  | Odorless |

- **Change in condition**

**Melting point/Melting range:** ca. 710 - 810°C (ca. 1310 - 1490°F)

**Boiling point/Boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Auto igniting:** Product is not selfigniting.

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

- **Density:** -

- **Solubility in / Miscibility with Water:** Insoluble.

- **Solvent content:**

- **Solids content:** 100 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Dangerous reactions** Reacts with strong acids.

- **Dangerous products of decomposition:** Toxic metal oxide smoke

## 11 Toxicological information

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

## 12 Ecological information

- **General notes:** Generally not hazardous for water

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### 13 Disposal considerations

- **Product:**
- **Recommendation:** Contact manufacturer for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Packaging can be reused or recycled after cleaning.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

### 15 Regulations

- **Sara**

|  |  |
|--|--|
| · <b>Section 355 (extremely hazardous substances):</b> |  |
| None of the ingredient is listed.                      |  |

|  |        |
|--|--------|
| · <b>Section 313 (Specific toxic chemical listings):</b> |        |
| 7440-22-4  | silver |

|   |          |
|---|----------|
| · <b>TSCA (Toxic Substances Control Act):</b> |          |
| 7440-57-5                                     | Gold     |
| 7440-22-4                                     | silver   |
| 7440-06-4                                     | platinum |

- **Proposition 65**

|   |  |
|---|--|
| · <b>Chemicals known to cause cancer:</b> |  |
| None of the ingredients is listed.        |  |

|  |  |
|--|--|
| · <b>Chemicals known to cause reproductive toxicity for females:</b> |  |
| None of the ingredients is listed.                                   |  |

|  |  |
|--|--|
| · <b>Chemicals known to cause reproductive toxicity for males:</b> |  |
| None of the ingredients is listed.                                 |  |

|   |  |
|---|--|
| · <b>Chemicals known to cause developmental toxicity:</b> |  |
| None of the ingredients is listed.                        |  |

- **Carcinogenicity categories**

|  |                        |    |
|--|------------------------|----|
| · <b>EPA (Environmental Protection Agency)</b> |                        |    |
| 7440-22-4                                      | silver                 | D  |
| 7440-66-6                                      | zinc (in compact form) | II |

|   |  |
|---|--|
| · <b>IARC (International Agency for Research on Cancer)</b> |  |
| None of the ingredients is listed.                          |  |

|  |  |
|--|--|
| · <b>NTP (National Toxicology Program)</b> |  |
| None of the ingredients is listed.         |  |

|   |  |
|---|--|
| · <b>TLV (Threshold Limit Value established by ACGIH)</b> |  |
| None of the ingredients is listed.                        |  |

|   |  |
|---|--|
| · <b>MAK (German Maximum Workplace Concentration)</b> |  |
| None of the ingredients is listed.                    |  |

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

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**· OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**· Product related hazard informations:**

Although this product is not subject to identification regulations, we recommend that the safety suggestions are observed.

**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.

**· Department issuing MSDS:** Abteilung Umweltschutz**· Contact:** Herr Marcus Müller**· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

USA