

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 Optimum Lot 710**
- **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
Marcus.Mueller@wieland-dental.de
- **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%
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- **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:** CO₂, 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.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.
- **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 ³
REL	0.01 mg/m ³
TLV	0.1 mg/m ³ metal

- **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

- **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:** Safety glasses

9 Physical and chemical properties

· General Information

Form:	Solid in various forms
Color:	Yellow
Odor:	Odorless

· Change in condition

Melting point/Melting range: 680 - 700°C (1256 - 1292°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:** No dangerous decomposition products known.

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

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.

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14 Transport information

- Maritime transport IMDG:
- Marine pollutant: No

15 Regulations

- Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

7440-22-4	silver
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· TSCA (Toxic Substances Control Act):
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7440-57-5	Gold
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7440-22-4	silver
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7439-88-5	iridium
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· 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:
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None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

7440-66-6	zinc (in compact form)	II
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7440-22-4	silver	D
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· IARC (International Agency for Research on Cancer)
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None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)
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None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)
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None of the ingredients is listed.

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

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Product related hazard informations:
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Although this product is not subject to identification regulations, we recommend that the safety suggestions are observed.
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- **National regulations:**
- **Water hazard class:** Generally not hazardous for water.

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