Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.12.2012 *Version number 4* *Revision: 17.12.2012*

1 Identification of the substance/mixture and of the company/undertaking

· **Product identifier**

· **Trade name: W**

· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the preparation** 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

· **Further information obtainable from:**
Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein
Regulatory Affairs
msds@ivoclarvivadent.com
· **Emergency telephone number:** +423 / 235 33 13 (Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein)

2 Hazards identification

· **Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**
Ox. Sol. 2 H272 May intensify fire; oxidiser.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
O; Oxidising
R8: Contact with combustible material may cause fire.
· **Information concerning particular hazards for human and environment:**
Avoid breathing of grinding dust and vapours. Melted material may cause burns.
· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS03

· **Signal word** Danger
· **Hazard statements**
H272 May intensify fire; oxidiser.
· **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P221 Take any precaution to avoid mixing with combustibles.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P220 Keep/Store away from clothing/combustible materials.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.12.2012 *Version number 4* *Revision: 17.12.2012*

Trade name: W

(Contd. of page 1)

· ***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.
· ***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:***			
CAS: 7440-05-3 *EINECS: 231-115-6*	*palladium*	*O R8* *Self-heat. 2, H252; Ox. Sol. 2, H272*	*25-50%*
CAS: 7440-22-4 *EINECS: 231-131-3*	*silver*	*substance with a Community workplace exposure limit*	*10-<25%*

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

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 Firefighting 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.*

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.12.2012 *Version number 4* *Revision: 17.12.2012*

Trade name: W

(Contd. of page 2)

· ***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 fire - and explosion protection:*** *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 facilities:*** *No further data; see item 7.*

· ***Control parameters***

· ***Ingredients with limit values that require monitoring at the workplace:***	
7440-22-4 silver	
WEL ()	*Long-term value: 0.1 mg/m³*

· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***Exposure controls***
· ***Personal protective equipment:***
· ***General protective and hygienic measures:*** *Usual hygienic measures for dental practice.*
· ***Respiratory protection:*** *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 material 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).

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.12.2012 *Version number 4* *Revision: 17.12.2012*

Trade name: W

(Contd. of page 3)

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Solid
Colour:	White
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
Melting point/Melting range:	1230–1280 °C
Boiling point/Boiling range:	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not applicable.
· **Density at 20 °C:**	13.8 g/cm³
· **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.
· **Solvent content:**	
Solids content:	100 %
· **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.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.12.2012 *Version number 4* *Revision: 17.12.2012*

Trade name: W

(Contd. of page 4)

11 Toxicological information

· ***Information on toxicological effects***
· ***Acute toxicity:***
· ***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.

12 Ecological information

· ***Toxicity***
· ***Aquatic toxicity:*** *No further relevant information available.*
· ***Persistence and degradability*** *No further relevant information available.*
· ***Behaviour 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.*
· ***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.

· ***European waste catalogue***	
20 01 40	*metals*

· ***Uncleaned packaging:***
· ***Recommendation:*** *Disposal must be made according to official regulations.*

14 Transport information

· ***UN-Number***	
· ***ADR, ADN, IMDG, IATA***	*Void*
· ***UN proper shipping name***	
· ***ADR, ADN, IMDG, IATA***	*Void*
· ***Transport hazard class(es)***	
· ***ADR, ADN, IMDG, IATA***	
· ***Class***	*Void*

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 17.12.2012 *Version number 4* *Revision: 17.12.2012*

Trade name: W

(Contd. of page 5)

· **Packing group** · **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.
· **UN "Model Regulation":**	-

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**
The product is a medical device according to the EC-directive 93/42/EEC.
· **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.

· **Relevant phrases**
H252 Self-heating in large quantities; may catch fire.
H272 May intensify fire; oxidiser.
R8 Contact with combustible material may cause fire.
· **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
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals