

EU Safety Data Sheet

World-Cap



Date of issue / Reference 01.06.2007 lise / Version 2
Replaces version of 19.01.2006 hot
Date of printing 01.06.2007 **Sheet No. 1641**

Page 1 of 5

Company Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan
Principality of Liechtenstein

1 Commercial product name and supplier

- 1.1 Commercial product name / Designation **World-Cap**
- 1.2 Application / Use Amalgam
- 1.3 Producer Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan
Fürstentum Liechtenstein
- 1.4 Supplier
- 1.5 TOX emergency number Emergency-Call: +423 / 235 35 35
Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein
-

2 Composition

- 2.1 Chemical characterization Alloy powder and mercury in predosed capsules
- 2.2 Hazardous components
CAS No. 7439-97-6 40 % Mercury
T: Toxic. N: Dangerous for the environment. R23: Toxic by inhalation. R33: Danger of cumulative effects. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 2.3 Further information None.
-

3 Hazards identification

Toxic by inhalation. Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 First aid measures

- 4.1 Eye contact Flush eyes with plenty of water (10-15 min.). Call a physician.
- 4.2 Skin contact Wash thoroughly with soap and water.
- 4.3 Ingestion After ingestion call a physician immediately and show this safety data sheet. Give large amounts of water.
- 4.4 Inhalation If you feel unwell, seek medical advice (show this safety data sheet). If not breathing, give artificial respiration.
- 4.5 Further information Remove contaminated clothing.
-

5 Fire-fighting measures

- 5.1 Suitable extinguishing media The vapour is heavier than air and can collect in low areas.
not combustible

EU Safety Data Sheet

World-Cap



Date of issue / Reference 01.06.2007 lise / Version 2
Replaces version of 19.01.2006 hot
Date of printing 01.06.2007 **Sheet No. 1641**

Page 2 of 5

-
- 5.2 Extinguishing media to avoid Do not use direct water stream.
- 5.3 Further information Cool containers in the vicinity of the blaze using a water spray. In case of a fire very toxic mercury fumes will generate.
-

6 Accidental release measures Clean up with absorbent material (iodized activated carbon). Do not allow to flow off into the drains or waters. Dispose of according to local and national regulations.

7 Handling and storage

- 7.1 Handling Only adequately trained personnel should handle this product. For dental use only !
- 7.2 Industrial hygiene Usual hygienic measures for dental practice.
- 7.3 Storage Store in dry well ventilated area away from sources of ignition and heat. Keep containers tightly closed.
- 7.4 Place of storage Store at 2-28 °C / 26-82 °F
- 7.5 Fire- and explosion-protection Not required.
-

8 Exposure controls / Personal protection

- 8.1 Technical measures Control airborne concentration below the exposure guideline.
- 8.2 Control of threshold limits MAK (Maximale Arbeitsplatzkonzentration, Germany) is 0.1 mg/m³ (ceiling).
ACGIH (American Conference of Governmental Industrial Hygienists, USA) Threshold Limit Value (TLV) is 0.05 mg/m³ (ceiling).
- 8.3 Personal protective equipment
- 8.3.1 Respiratory protection In poorly ventilated areas, use air-purifying respiratory protection apparatus (type 89Hg/St). Do not breathe vapour.
- 8.3.2 Hand protection Gloves.
- 8.3.3 Eye protection Safety goggles.
- 8.3.4 Other Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.
-

9 Physical and chemical properties

- 9.1 Appearance Powder and Liquid
- 9.2 Colour silvery
- 9.3 Odour odourless

EU Safety Data Sheet

World-Cap



Date of issue / Reference 01.06.2007 lise / Version 2
Replaces version of 19.01.2006 hot
Date of printing 01.06.2007 **Sheet No. 1641**

Page 3 of 5

9.4	Change of physical state		Test method:
	Melting point	- 38 °C	
	Boiling point	356 °C (HG)	
9.5	Density	13.5 g/cm ³ (20°C)	
9.6	Vapour pressure		
		0.0016 mbar (20°C)	
9.7	Viscosity		
		not determined	
9.8	Solubility		
	Solubility in water		
		non soluble	
9.9	pH	not applicable	
9.10	Flash point		
		not applicable	
9.11	Ignition temperature		
		not applicable	
9.12	Explosion limits	Lower: Upper:	
		not applicable	
9.13	Further information	None.	

10 Stability and reactivity

10.1	Thermal decomposition	None, if used in accordance to instructions.
10.2	Hazardous decomposition products	Exposed to the heat of a fire the product may decompose, releasing highly toxic fumes.
10.3	Hazardous reactions	None, if used in accordance to instructions.
10.4	Further information	Avoid contact with ammoniac, amines, metals and strong acids.

11 Toxicological information

11.1	Acute toxicity	Alloy powder and mercury are predosed in closed capsules, therefore the danger of exposition to mercury vapours are low. Toxic by inhalation. Danger of cumulative effects. Do not open or damage the capsule before mixing.
11.2	Subacute / Chronic toxicity	In very rare cases amalgam allergies may occur. Inhalation is hazardous to the central nervous system.

EU Safety Data Sheet

World-Cap



Date of issue / Reference 01.06.2007 lise / Version 2
Replaces version of 19.01.2006 hot
Date of printing 01.06.2007 **Sheet No. 1641**

Page 4 of 5

11.3 Further information Avoid exposure of mercury to pregnant person.

12 Ecological information The product must not enter effluent, ground water, surface water or the soil.
German 'Wassergefahrdungs Klasse (WGK): 3

13 Disposal considerations Any disposal practice must be in compliance with local and national regulations.
Material in the elemental state and also left-overs from restorations should be saved in a plastic container for reuse or recycling. For disposal contact an expert for chemical waste, at your local-, federal- or state waste department.

13.1 EU waste key 06 04 04

14 Transport information

14.1 Transport at land

ADR	8	RID	8
UN Number	2809	Kemler Number	---
Packing Group			III
Proper shipping name			Mercury

14.2 Transport at sea

ADNR	8	IMDG	31-02
UN Number	2809		
EMS	F-A, S-B	MFAG	
Packing Group			III
Proper shipping name			Quecksilber (Mercury)

14.3 Air transport

ICAO / IATA-DGR	8		
UN Number	2809		
Proper shipping name	Mercury		
Subsidiary Risk			---
Labels			Corrosive
Packing Group			III
Passenger airplane	Packing Instructions		803
	max.		35 kg
Cargo Airplane	Packing Instructions		803
	max.		35 kg

14.4 Further information Sample shipment not allowed by mail.

15 Regulatory information This product requires classification according to the criteria of the "Gefahrstoffverordnung".

EU Safety Data Sheet

World-Cap



Date of issue / Reference 01.06.2007 lise / Version 2
Replaces version of 19.01.2006 hot
Date of printing 01.06.2007 **Sheet No. 1641**

Page 5 of 5

The product is a medical device according to the EC-directive 93/42/EEC.

15.1 UN number 2809

15.2 National regulations

15.3 EU number 231-106-7

15.4 Hazard symbols



15.5 Hazard designation T: Toxic. Contains Mercury.

15.6 Risk phrases

R: 23-33-50/53

23 Toxic by inhalation.

33 Danger of cumulative effects.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

15.7 Safety phrases

S: 7-45-60-61-1/2

7 Keep container tightly closed.

45 In case of accident or if you feel unwell, seek medical advise immediately (show the label where possible).

60 This material and its container must be disposed of as hazardous waste.

61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

1/2 Keep locked up and out of reach of children.

15.8 MAK value 0.01 ml/m³ (ppm) 0.1 mg/m³

15.9 BVD classification (CH) ---

15.10 VbF (D) ---

15.11 Further information None.

16 Other information Version: 2

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not have the meaning of guarantees on properties.