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# SAFETY DATA SHEET

## Bestdent Dental Amalgam Capsules Ag 40,3

### 1.0 PREPARATION / COMPANY NAME

- 1.1 Preparation name : **World Work Dental Amalgam Capsules Ag 40,3**  
1.2 Company name : WORLD - WORK srl  
Via del Progresso, 47  
36054 Montebello Vicentino (VI)  
tel. 0444/574297 fax 0444/370543  
e-mail: info@worldwork.it  
1.3 Recommended use : Filling cavitated teeth by dental professionals  
1.4 Emergency contact number : Contact the nearest Poison Information Centre

### 2.0 HAZARD IDENTIFICATION

- 2.1 Preparation classification : T; R23 R33, N; R50/53  
2.2 Means of introduction : Percutaneous: YES  
Inhalation: YES  
Swallowing (accidental): YES  
2.3 Effect and symptoms  
Acute effects dose-dependent : Skin: irritation, sensitization  
Oral cavity: irritation, gingivostomatitis  
Lungs: irritation, chemical pneumonia  
Urogenital apparatus: kidney damage  
Chronic effects : Skin: irritation, sensitization  
Nervous system: erethism, anorexia, tremors, ataxy, polyneuropathy, optic nerve atrophy  
Eyes: cataract  
Urogenital apparatus: kidney damage  
Cancerogenous, Mutagenic and : Cancerogenous effects - IARC: group 3  
Reproductive Toxicity effects : Cancerogenous effects - ACGIH: group A4  
Cancerogenous effects - DFG: category 3B

The preparation is currently not classified for mutagenic and reproductive toxicity effects. Mutagenic effects have not been demonstrated. Experimental reproductive toxicity studies described at point 11 which currently do not modify classification are available for this preparation.

### 3.0 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	Cas N°	EINECS N°	Content %	S Phrases	R Phrases
Mercury, Hg	7439-97-6	231-106-7	50	T	R23-33-50/53
Silver, Ag	7440-22-4	231-131-3	22	--	--
Tin, Sn	7440-31-5	231-141-8	15	--	--
Copper, Cu	7440-50-8	231-159-6	13	--	--

### 4.0 FIRST AID MEASURES

- 4.1 If inhaled : Move infected persons to fresh air and leave them to rest; seek medical attention  
4.2 If ingested : Remove the material from the pharynx (from the mouth) without causing vomiting; seek medical attention  
4.3 On skin contact : Wash skin with neutral soap and water.  
In cases of permanent irritation, seek medical attention.  
4.4 On contact with eyes : Wash with plenty of water, keeping the eyelids well opened.  
In cases of permanent irritation, seek medical attention.

## 5.0 FIRE FIGHTING MEASURES

- 5.1 General and/or Various : Remove the containers from the danger area without creating risks if possible.  
Contain and collect the extinguishing water for subsequent disposal
- 5.2 Suitable extinguishing media : Select the correct extinguisher on the basis of the source of the flammable mixture.
- 5.3 Special danger of exposure from the combustion or gas produces that are created by the substance or preparation : Distance containers from the adjacent fire if possible or cool them. If exposed to heat or directly involved in the fire, same containers can create toxic smoke  
The preparation can cause pollution if dispersed.
- 5.4 Special protective equipment : Wear:  
- self-contained breathing apparatus  
- full protective clothing made up of helmet with visor and neck protection, fireproof jacket and trousers with reflective bands around the arms, legs and waist.  
For anything not contained in this point, refer to point 8 of this sheet.

## 6.0 ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions : Small spills and leaks:  
▪ Guarantee exchange ventilation or other control instruments for maintaining the concentrations of vapour moved by the air below the respective limits of professional exposure  
Large spills and leaks:  
▪ wear mask with respirator before approaching the spill area.  
▪ Stop the leak if doing so does not cause risks.  
▪ Distance those people who are not involved in emergency interventions from the spill area.  
▪ Whenever possible work above wind.  
▪ Ventilate areas involved in the spill in a suitable manner.  
▪ For information information not contained in this point regarding the recommended protective equipment, refer to point 8 of this sheet.
- 6.2 Environmental precautions : systems and operative procedures must be used that stop the product from reaching sewerage systems, wells or waterways.
- 6.3 Restoration methods : mechanically collect the released material, which must subsequently be taken to centres authorised for collection of the resulting waste.  
Wash flooring with calcium sulphide after having collected the spill.  
Place the collected material in clean and labelled containers.  
Neutralise with calcium sulphide or sodium thiosulphate.  
Wherever possible use suitable suction kits that exist on the market.  
If necessary, begin restoration procedures as indicated in Italian Legislative Decree 152/2006, part IV, title V.  
Do not use cleaning products with a strong oxidant base.

## 7.0 HANDLING AND STORAGE

- 7.1 Handling : Ventilation is necessary when using and handling the product.  
Avoid direct contact with the mercury.  
Prevent exposure to mercury vapour and amalgam residues.  
Ensure the areas where amalgam plugs are removed have enough suction, use suitable cooling methods, and protect mouth and eyes.  
The composite must be equipped with an amalgam separator. Follow laws in force regarding the type and system of same separator and the handling of amalgam waste.  
Excess amalgam must be stored in a suitable closed container for mercury containing fixing substances.
- 7.2 Storage : Preserve in the original closed containers, in a protected and ventilated area, at a temperature of not more than 25 °C. Expiry date: 5 years from production date at the above indicated conditions.

## 8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Information and general measures : Do not eat or drink or smoke in the work area.
- 8.2 S phrases : S 1/2: Keep locked up and out of the reach of children  
S 7: Keep container tightly closed  
S 9: Keep container in a well-ventilated place  
S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S 60: This material and its container must be disposed of as hazardous waste.  
S 61: Avoid release to the environment. Refer to special instructions/safety data sheets
- 8.3 Personal protection  
Breathing apparatus : Use with suitable ventilation  
Skin and body : Laboratory coat  
Hands : PVC gloves  
Eyes : Protective goggles
- 8.4 Work exposure limits : TWA 0.02 mg/m<sup>3</sup> 8 hour (e)

## 9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1	<u>Form</u>	: Liquid
9.2	<u>Colour</u>	: Metallic grey
9.3	<u>Odour</u>	: Odourless
9.4	<u>Boiling point</u>	: 356 °C
9.5	<u>Vapour pressure</u>	: 0.26 Pa at 20 °C
9.6	<u>Density at 25 °C</u>	: 13.5 g/cm <sup>3</sup>
9.7	<u>Vapour density</u>	: 6.9 (air = 1)
9.8	<u>Viscosity at 25° C (mPas)</u>	: not determined
9.9	<u>Solubility in water</u>	: not soluble
9.10	<u>pH</u>	: not applicable
9.11	<u>Flash point (°C)</u>	: not flammable
9.12	<u>Self-flammability</u>	: not applicable

The alloy and the mercury are packed separately in capsules.

## 10.0 STABILITY AND REACTIVITY

10.1	<u>Conditions to avoid</u>	: Conserve away from heat sources in a ventilated area
10.2	<u>Material / substances to avoid</u>	: Attacks aluminium and many metals, forming amalgams Ammonia and halogens Lithium, rubidium, chlorine dioxide, methyl azide, ethylene oxide, oxidants, oxygen, tetracarbonylnickel
10.3	<u>Hazardous decomposition products</u>	: When heated develops highly toxic smoke

## 11.0 TOXICOLOGICAL INFORMATION

11.1	<u>Acute toxicology</u>	: The bond for amalgam and mercury are pre-dosed in closed capsules; the danger of exposure to mercury vapours is low. Do not open or damage the capsules before they are vibrated. Toxic by inhalation
11.2	<u>Long-term toxicology</u>	: Acute exposure to mercury vapours may cause serious acute intoxication with lung symptoms and neurological symptoms. Exposure can cause allergy to the amalgam.
11.3	<u>Other information</u>	: Pregnant women must not be exposed to mercury.

## 12.0 ECOLOGICAL INFORMATION

This product must not enter effluent water, ground water or the soil.

## 13.0 DISPOSAL CONSIDERATIONS

13.1	<u>Disposal methods</u>	: The methods for handling waste must be evaluated case by case according to the waste matter itself and in compliance with what is indicated by Community standards and national laws in force. When handling waste and in cases of accidental waste spills, follow the indications given in points 6 and 7; care and specific actions must in any case be evaluated according to the waste matter. In compliance with the 91/689/EEC Directive, the substance must be classified as hazardous waste when spilled.
13.2	<u>European refuse catalogue</u>	: 18 01 10* waste of amalgam produced by odontoiatric interventions
13.3	<u>Refuse danger class</u>	: H 6 "Toxic" H 14 "Ecotoxic"

## 14.0 TRANSPORT INFORMATION

- Official designation for transport: Mercury
- UN number: 2809
- Class or division: 8
- Subsidiary risks: none
- Packing group: III
- Danger identification number: 80
- ONU special prescriptions: none

As a general rule, follow Italian Ministerial Decree of 22 February 1990, ONU, ADR (by road) RID (by rail) IMO (by sea), ICAO (by air) for transport.

IMO, ADR and RID: manufactured objects or instruments that do not contain more than 1 kg of mercury are not required to follow Code regulations.

## 15.0 REGULATORY INFORMATION

- 15.1 Reference standards : The product is a medical device in compliance with directive 93/42/EEC and s.m.  
15.2 UN No. : 2809  
15.3 EC No. : 231-106-7  
15.4 Dander symbols :



Toxic; Dangerous to the environment

- 15.5 Risk phrases : R23 Toxic if inhaled.  
R33 Danger of cumulative effects.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 15.6 Safety phrases : S7 Keep container tightly closed  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible)  
S60 This material and its container must be disposed of as hazardous waste  
S61 Avoid release to the environment. Refer to special instructions / safety data sheets.
- 15.7 Contains : Mercury  
15.8 Product use : Material for dental plugs  
15.9 EU statistics classification (tariff code) : 31089091

## 16.0 OTHER INFORMATION

The information given herein is based on our knowledge and held as being correct, at the Sheet emission date, regarding regulations on safety and the correct use of the preparation.

The user must attain to laws in force, and ensure that the information contained is updated, suitable and complete; this with regard to the specific use that must be made of the substance in the production cycle of same user.

The company is not liable for any incorrect or improper behaviour and action carried out by the purchaser, for product use that is not reasonably predictable or in case of unauthorised resale or because of lack of information given to the end user by the retailer.

This sheet cancels and replaces all previous editions.