Date of issue: 02.04.2025 Printing date: 02.04.2025

This product is a medical device as defined in Directive 93/42/EEC on medical devices (MDD) respectively Regulation (EU) 2017/745 (MDR), which is invasive or used in direct physical contact with the human body. For this product a safety data sheet is not legally required. The provision of this document is on a voluntary basis.

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

1.1 Product identifier

Trade name:

Harvard BioPOWER Dentine

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses:

Dental product.

Restrictions on use:

This product should only be supplied or handled to dentists or dental technicians or upon their instructions.

1.3 Details of the supplier of the safety information sheet

Manufacturer/supplier:

Harvard Dental International GmbH Robert-Bosch-Strasse 2 25335 Elmshorn, Germany info@harvard-dental-international.de

1.4 Emergency telephone number

+49 30 99 28 978-0

This product consists of several subunits: Harvard BioPOWER Dentine (Liquid)

Harvard BioPOWER Dentine (Powder)

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

1.1 Product identifier

Trade name:

Harvard BioPOWER Dentine (Liquid)

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses:

Dental product.

Restrictions on use:

This product should only be supplied or handled to dentists or dental technicians or upon their instructions.

1.3 Details of the supplier of the safety information sheet

Manufacturer/supplier:

Harvard Dental International GmbH Robert-Bosch-Strasse 2 25335 Elmshorn, Germany info@harvard-dental-international.de

1.4 Emergency telephone number

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Medical devices as defined in Directive 93/42/EEC on medical devices (MDD) respectively Regulation (EU) 2017/245, which are invasive or used in direct physical contact with the human body are exempt from labeling requirements of Regulation (EC) No. 1272/2008 (CLP/GHS). Although not required, classification and labeling are indicated as follows:

Classification:

Skin irritation, Category 2; H315 Causes skin irritation.

Eye irritation, Category 2; H319 Causes serious eye irritation.

Skin sensitization, Category 1; H317 May cause allergic skin reaction.

2.2 Label elements

CLP Regulation (EC) No. 1272/2008

Signal word:

Warning.

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Hazard pictograms:



GHS07

Hazard statements:

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause allergic skin reaction.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water.

2.3 Other hazards

P302 + P352

Results of PBT and vPvB assessment:

PBT: not applicable. vPvB: not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Chemical characterization (description):

Polyalkenoate acid, methacrylates.

Hazardous components:

CAS-No. 868-77-9 2-Hydroxyethyl-methacrylate GHS07, H315, H319, H317

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Seek medical advice, if symptoms occur, which can be caused by the product.

after skin contact:

Wash with plenty of water and soap.

after inhalation:

Fresh air.

after eve contact:

Rinse with plenty of water and consult a doctor.

after swallowing:

If symptoms persist consult a doctor.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media:

CO₂, extinguishing powder, water spray. Use extinguishing method and media suitable to surrounding fire.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

Protective equipment:

Wear self-contained respiratory protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Personal precautions:

Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

6.2 Environmental precautions

Do not allow to enter drains/surface water/ ground-water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid binding material. Forward for disposal. Clean up affected area.

6.4 Reference to other sections

See Section 7: Handling and storage

See Section 8: Exposure controls/personal protection

See Section 13: Disposal considerations

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling:

This product should only be supplied or handled to dentists or dental technicians or upon their instructions.

Information for safe handling:

Observe normal care for working with chemicals.

Information about fire and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Store at a dry place. Store tightly closed. Storage temperature 4 - 25°C.

Requirements at storerooms and containers:

Store only in the original containers.

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Information about storage in one common storage facility:

Store away from food stuffs.

Further information on storage conditions:

None.

Storage class:

-

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information on the design of technical systems:

_

Components with limits of values to be supervised at the workplace:

The product contains no relevant quantities of components with limits of values to be supervised at the workplace.

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Normal hygienic measures. The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs and beverages. Avoid contact with eyes or skin.

Respiratory protection:

Required, when aerosols are generated.

Hand protection:

Protective gloves. Due to missing tests no recommendation to the glove material can be given for the product.

Eve protection:

Safety glasses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Form: liquid
Color: colorless
Odor: faint odor

Change in condition:

Melting point/melting range: not determined Boiling point/boiling range: $\sim 100 \, ^{\circ}\text{C}$

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Flash point: > 100 °C
Ignition temperature: not applicable

Danger of explosion: none

Density: 1.2 (20°C) g/cm³ Vapor pressure: not determined

pH: ~ 2

Solubility in/miscibility with:

Water: very soluble

Content of solvents:

Organic solvents: none

SECTION 10: Stability and reactivity

10.1 Reactivity

Expected to be non-reactive under normal conditions of use.

10.2 Chemical stability

The product is stable by proper use and storage.

10.4 Conditions to avoid

Heat, sunlight, peroxides.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD50 (oral, rat) 5050 mg/kg.

Primary irritation:

Skin: irritant.

Eye: irritant.

Sensitization: no sensitizing effects known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

SECTION 12: Ecological information

General information:

Avoid transfer into environment.

Classification hazardous to water:

Water hazard class 1 (self-classification): slightly hazardous to water.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:

Use proper landfill disposal or incineration in accordance with local, state and federal regulations.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

Land transport ADR/RID and GGVSE (Germany):

No subject to transport regulations.

Sea transport IMDG Code:

No subject to transport regulations.

Air transport ICAO-TI and IATA-DGR:

No subject to transport regulations.

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.

SECTION 15: Regulatory information

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

National regulations:

Water hazard class 1 (self-classification): slightly hazardous to water.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

For invasive medical devices or medical devices in direct contact with the human body, the Medical Device Regulation does not require a safety data sheet. The safe use of the product is indicated in the instructions for use and/or the labeling.

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. Users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.

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This product is a medical device as defined in Directive 93/42/EEC on medical devices (MDD) respectively Regulation (EU) 2017/745 (MDR), which is invasive or used in direct physical contact with the human body. For this product a safety data sheet is not legally required. The provision of this document is on a voluntary basis.

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

1.1 Product identifier

Trade name:

Harvard BioPOWER Dentine (Powder)

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses:

Dental product.

Restrictions on use:

This product should only be supplied or handled to dentists or dental technicians or upon their instructions.

1.3 Details of the supplier of the safety information sheet

Manufacturer/supplier:

Harvard Dental International GmbH Robert-Bosch-Strasse 2 25335 Elmshorn, Germany info@harvard-dental-international.de

1.4 Emergency telephone number

+49 30 99 28 978-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Medical devices as defined in Directive 93/42/EEC on medical devices (MDD) respectively Regulation (EU) 2017/245, which are invasive or used in direct physical contact with the human body are exempt from labeling requirements of Regulation (EC) No. 1272/2008 (CLP/GHS). Although not required, classification and labeling are indicated as follows:

Classification:

Skin irritation, Category 2; H315 Causes skin irritation.

Eye damage, Category 1; H318 Causes serious eye damage.

Skin Sensitization, Category 1; H317 May cause allergic skin reaction.

Acute aquatic toxicity, Category 1, H400 Very toxic to aquatic life.

Chronic aquatic toxicity, Category 1, H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

CLP Regulation (EC) No. 1272/2008

Signal word:

Danger.

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Hazard pictograms:



GHS05

GHS07



GHS09

Hazard statements:

H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause allergic skin reaction.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P273 Avoid release to the environment.

2.3 Other hazards

Results of PBT and vPvB assessment: PBT: not applicable. vPvB: not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Chemical characterization (description):

MTA, Zinc oxide, dental glass, photo initiators.

Hazardous components:

CAS No. 1314-13-2 Zinc oxide GHS09, H410, H411

Mineral oxides GHS05, GHS07, H315, H318, H317

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Seek medical advice, if symptoms occur, which can be caused by the product.

after skin contact:

Wash with plenty of water and soap.

after inhalation:

Fresh air.

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after eye contact:

Rinse with plenty of water and consult a doctor.

after swallowing:

consult a doctor immediately.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media:

CO₂, extinguishing powder, water spray. Use extinguishing method and media suitable to surrounding fire

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

Protective equipment:

Wear self-contained respiratory protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:

Avoid dust formation. Avoid inhalation of dust.

6.2 Environmental precautions

Do not allow to enter drains/surface water/ ground-water.

6.3 Methods and material for containment and cleaning up

Pick up mechanically. Clean up affected area.

6.4 Reference to other sections

See Section 7: Handling and storage

See Section 8: Exposure controls/personal protection

See Section 13: Disposal considerations

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling:

This product should only be supplied or handled to dentists or dental technicians or upon their instructions.

Information for safe handling:

Observe normal care for working with chemicals.

Information about fire and explosion protection:

No special measures required.

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7.2 Conditions for safe storage, including any incompatibilities Storage:

Store at a dry place. Store tightly closed. Storage temperature 10 - 25°C.

Requirements at storerooms and containers:

Store only in the original containers.

Information about storage in one common storage facility:

Store away from food stuffs.

Further information on storage conditions:

None.

Storage class:

-

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information on the design of technical systems:

-

Components with limits of values to be supervised at the workplace:

The product contains no relevant quantities of components with limits of values to be supervised at the workplace.

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Normal hygienic measures. The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs and beverages. Avoid contact with eyes or skin.

Respiratory protection:

Required, when aerosols are generated.

Hand protection:

Protective gloves. Due to missing tests no recommendation to the glove material can be given for the product.

Eve protection:

Safety glasses.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Form: powder
Color: tooth colored
Odor: odorless

Change in condition:

Melting point/melting range: not applicable
Boiling point/boiling range: not applicable
Flash point: not applicable
Ignition temperature: not applicable

Danger of explosion: none

Density: not applicable Vapor pressure: not applicable

pH: > 11

Solubility in/miscibility with:

Water: insoluble Content of solvents: none Organic solvents: none

SECTION 10: Stability and reactivity

10.1 Reactivity

Expected to be non-reactive under normal conditions of use.

10.2 Chemical stability

The product is stable by proper use and storage.

10.4 Conditions to avoid

No information available.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

No data available.

Primary irritation:

Skin: slight irritant (may cause skin irritation).

Eye: irritant, strong caustic effect.

Sensitization: sensitization by skin contact possible.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

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General information:

Avoid transfer into environment.

Classification hazardous to water:

Water hazard class 2 (self-classification): hazardous to water.

SECTION 13: Disposal considerations

SECTION 12: Ecological information

13.1 Waste treatment methods

Recommendation:

Use proper landfill disposal or incineration in accordance with local, state and federal regulations.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

Land transport ADR/RID and GGVSE (Germany):

ADR, RID

UN 3077 UMWELTGEFÄHRDENDER STOFF, FEST N.A.G (Zinkoxid), 9, III.

Sea transport IMDG Code:

IMDG-Code

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), 9, III EmS: F-A S-F

Air transport ICAO-TI and IATA-DGR:

CAO, PAX

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide), 9, III.

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.

SECTION 15: Regulatory information

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

National regulations:

Water hazard class 2 (self-classification): hazardous to water.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

Date of issue: 02.04.2025 Printing date: 02.04.2025

SECTION 16: Other information

For invasive medical devices or medical devices in direct contact with the human body, the Medical Device Regulation does not require a safety data sheet. The safe use of the product is indicated in the instructions for use and/or the labeling.

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. Users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.