Date of issue: 10.05.2019 Version: 6

Printing date: 10.05.2019

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

Product Identifier

Trade name: Harvard Cement normal setting, liquid Harvard Cement quick setting, liquid Harvard Cement OptiCaps[®], liquid

Use of the preparation: Dental Product

Details of the supplier of the safety data sheet:

Manufacturer/supplier:

Harvard Dental International GmbH,

Margaretenstraße 2-4,

15366 Hoppegarten, Germany

info@harvard-dental-international.de

Emergency telephone number:

+ 49 (0) 30 99 28 978-0 (Qualitätssicherung)

2. Hazards identification

Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:

Skin Corr. 1B; H314 Causes severe skin burns and eye damage

Information concerning particular hazards for human and environment:

The product has to be labeled due to calculation procedure for the "General Classification guideline for preparations of the EU" in the latest version.

Label elements

Labeling according to Regulation (EC) 1272/2008:

Hazard pictograms



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage

Precautionary statements

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Labeling according to EU guidelines:

Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body; are exempted from the provisions of Regulation (EC) No. 1272/2008 (CLP/GHS) usually if they are in the finished state and intended for the final user.

Other hazards

Results of PBT and vPvB assessment

PBT: not applicable **vPvB:** not applicable

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3. Composition/Information on Ingredients

Chemical characterization:

Description:

Aqueous solution of phosphoric acid

Hazardous components:

CAS 7664-38-2 Phosphoric acid GHS05, H314 50 – 90 %

4. 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. Immediately remove contaminated clothing. **after inhalation:** Fresh air. Consult a doctor.

after eye contact: Rinse opened eye for several minutes under running water and consult a doctor **after swallowing:** Make victim drink plenty of water. Avoid vomitting. . Do not attempt to

neutralize. Seek medical advice.

5. Fire fighting measures

Extinguishing media:

Non combustible. In case of fire use extinguishing method and media suitable to surrounding fire. **Special hazards arising from the substance or mixture** Fire may cause evolution of oxides of phosphorus. Suppress vapors with water spray.

Protective equipment Wear self-contained respiratory protective equipment

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid substance contact.. Do not inhale vapours/aerosols. Ensure adequate ventilation.

Environmental precautions:

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

Methods for cleaning up:

Absorb with liquid binding and neutralizing material. Forward for diposal. Clean up affected area. Ensure adequate ventilation.

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:

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

Precautions for safe handling: Observe normal care for working with chemicals

Information about fire and explosion protection: none

Storage: Store at a dry place. Store tightly closed. Storage temperature < 25°C.

Requirements at storerooms and containers: Store only in the original containers

Further information on storage conditions:

Store away from food stuffs. Avoid contact with alkalis, heavy-metal-containing components and combustibles

Specific end uses: No further relevant information available

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8. Exposure controls/personal protection

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

CAS-No. nameartvalueunit[7664-38-2]Phosphoric acidTRGS 900 AGW2mg/cm³

type of exposure: inhalable fraction

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

Personal protective equipment:

General protective and 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

Hand protection

Protective gloves.

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

Eye protection: Safety glasses

Respiratory protection: Required, when aerosols are generated

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form: Liquid
Color: colorless
Odor: Faint odor

Value Unit Method

Safety relevant basic data

Melting point/melting range: n.d.

Boiling point/boiling range: > 100 °C

Flash point: n.a.

Autoignition temperature: n.a. (non combustible)

Danger of explosion:noneDensity:1.7 g/cm3Vapor pressure:Non volatile

pH: 1 - 2

Solubility in/miscibility with:

Water: Very soluble

Content of solvents: none Organic solvents: none

10. Stability and reactivity

Thermal decomposition / conditions to be avoided

Conditions to avoid: Bases, metallic oxides most metals and metal alloys: Formation of hydrogen. Incompatible with iron/iron-containing compounds, steel, aluminium and their compounds.

Hazardous decomposition products: Fire may cause evolution of oxides of phosphorus.

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11. Toxicological information

Acute toxicity:

LD₅₀ (oral) Rat: 1530 mg/kg

Primary irritation:

skin: Caustic effect on skin and mucous membranes

eve: Strong caustic effect. Risk of blindness.

after inhalation: Irritation symptoms in the respiratory tract. **after ingestion:** Strong caustic effect on mouth and throat.

Sensitization: not observed

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.

12. Ecological information

General information: Anorganic substance. Does not cause biological oxigen deficit.

Harmful effect on aquatic organisms. Harmful effect due to pH shift.

Water pollution class: WGK = 1 (slightly polluting substance).

13. Disposal considerations

Product:

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

14. Transport information

Land transport ADR/RID and GGVS/GGVE (Germany):

UN 1805 PHOSPHORSÄURE, LÖSUNG, 8, III

Sea transport IMDG:

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

EmS: F-A S-B

Air transport ICAO-TI and IATA-DGR:

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, 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.

15. Regulatory information

Classification according to EC-guidelines:

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

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. Other information:

Changes compared with the previous version:

Adaptation according to 1907/2006/EG, Article 31

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. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.

Date of issue: 10.05.2019 Version: 6

Printing date: 10.05.2019

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

Product Identifier

Trade name: Harvard Cement normal setting, powder Harvard Cement quick setting, powder Harvard Cement OptiCaps®, powder

Use of the preparation: Dental product

Details of the supplier of the safety data sheet:

Manufacturer/supplier:

Harvard Dental International GmbH,

Margaretenstraße 2-4,

15366 Hoppegarten, Germany

info@harvard-dental-international.de

Emergency telephone number:

+ 49 (0) 30 99 28 978-0 (Qualitätssicherung)

2. Hazards identification

Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:

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

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General classification guideline for preparations of the EU" in the latest valid version.

Label elements:

Labeling according to Regulation (EC) 1272/2008:

Hazard pictograms



Signal word

Warning

Hazard statements

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary statements

P273 Avoid release to the environment

Labeling according to EU guidelines:

Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body; are exempted from the provisions of Regulation (EC) No. 1272/2008 (CLP/GHS) usually if they are in the finished state and intended for the final user.

Other hazards

Results of PBT and vPvB assessment

PBT: not applicable **vPvB:** not applicable

3. Composition/Information on Ingredients

Chemical characterization: Mixture

Description of the mixture: Mixture of zinc oxide, magnesium oxide and pigments

Hazardous components:

Zinc oxide [CAS-No. 1314-13-2] GHS09, H410, H411 80 – 100 %

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4. 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 eye contact: Rinse opened eye for several minutes under running water and consult a

doctor

after swallowing: Seek medical advice immediately

5. Fire fighting measures

Extinguishing media:

Use extinguishing method and media suitable to surrounding fire

Special hazards arising from the substance or mixture No further relevant information available

Protective equipment Wear self-contained respiratory protective equipment. Prevent fire fighting water from entering surface water or groundwater.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid inhalation of dust.

Environmental precautions:

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

Methods for cleaning up:

Take up mechanically. Forward for disposal. Clean up affected area. Avoid generation o dust.

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:

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

Precautions for safe handling: Observe normal care for working with chemicals **Information about fire and explosion protection:** No special measures required

Storage:

Requirements at storerooms and containers: Store only in the original containers

Further information on storage conditions:

Store at dry place, storage temperature < 25°C. Store away from food stuffs.

Specific end uses: No further relevant information available

8. Exposure controls/personal protection

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

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

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

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs and beverages.

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Hand protection

Protective gloves.

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

Eve protection: safety glasses

Respiratory protection: Required, when aerosols are generated

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form: powder Color: yellowish Odor: odorless

Value Unit Method

Safety relevant basic data

Melting point/melting range:n.a.Boiling point/boiling range:n.a.Flash point:n.a.

Ignition temperature: n.a. (non combustible)

Danger of explosion: none **Density:** n.a.

Vapor pressure: Not applicable (non volatile)
Solubility in/miscibility with: slightly in toluene, organic solvents

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

10. Stability and reactivity

Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications.

Possibility of hazardous reactions: no dangerous reaction known

Conditions to avoid: avoid heat, direct sunlight

Incompatible materials: not known

Hazardous decomposition products: no dangerous decomposition products known.

11. Toxicological information

Acute toxicity: LD_{50} (rat) >5000 mg/kg (zinc oxide)

Primary irritation: skin: slight irritating eve: irritating effect

Sensitization: no sensitizing effect 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.

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12. Ecological information

Toxicity:

Aquatic toxicity: May cause long term adverse effect in the aquatic environment

Persistence and degradability: No further relevant information available

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available

Mobility in soil No further relevant information available

General information: Do not allow product into surface water or sanitary sewer system

Classification of water endangerment: WGK = 2 (polluting substance).

13. Disposal considerations

Product:

Recommendation:

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

Uncleaned packaging: Handle contaminated packaging in the same way as the substance itself.

Recommendation: Disposal must be made according to official regulations

14. Transport information

Land transport ADR/RID and GGVS/GGVE (Germany)

ADR, RID

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

Sea transport IMDG

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.

15. Regulatory information

Classification according to EC-guidelines:

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

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. Other information:

Changes compared with the previous version:

Adaptation according to 1907/2006/EG, Article 31

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. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.