

Material Safety Data Sheet

Acc. to 91/155/EEC adjustment acc. to Directive 2001/58/EC
Hoffmann Dental Manufaktur GmbH

Reviewed on: 16 December 2009

1. Identification of substance and manufacturer's name

Product details/Trade name:



HOFFMANN'S COPPER CEMENT, POWDER

Manufacturer/Supplier:

Wangenheimstr. 37/39, D-14193 Berlin
Telephone: ++49 (0) 30 / 85 10 27 3
Fax: ++49 (0) 30 / 82 70 45 40

Information department/Emergency information:

Quality assurance department, telephone: ++49 (0) 30 / 85 10 27 52
e-mail: sicherheit@hoffmann-dental.com

2. Composition/Data on ingredients

Chemical characterization:

Description: Mixture of below-mentioned substances with innocuous additions.

Hazardous ingredients:			
CAS: 1314-13-2 EINECS: 215-222-5	Zinc Oxide	N; R 50/53	80 - 90 %
CAS: 1309-48-4 EINECS: 215-171-9	Magnesium Oxide		5 - 10 %
CAS: 7789-75-5 EINECS: 232-188-7	Calcium Fluoride		0 - 5 %

3. Hazards identification

Hazard designation:

N Hazardous to the environment.

Special danger warning for human and environment:

The product has to be labelled due to the calculation procedure of the „EU-Directive of the General Classification of Preparations“ in the latest valid version.

R 50/53: Very toxic to aquatic organisms, may cause long-term harmful effects in the waters.

Classification system:

The classification is in compliance with the current EU-lists, but is also completed with details given by technical literature and company.

4. First aid measures

- **After inhaling:** Fresh air.
- **After skin contact:** Remove by washing under the running water.
- **After eye contact:** Flush opened eye with running water for several minutes. Consult an eye specialist.
- **After swallowing:** (A plenty of substance) In case of feeling unwell consult a physician immediately.

5. Fire fighting measures

Suitable extinguishing agents:

Not applicable

Special protective equipment:

No special measures are required.

6. Accidental release measures

Person-related safety precautions:

Avoid inhaling of powder.

Environmental precautions:

Prevent any spillage from entering the sewage system.

Methods of cleaning up:

Pick up dry powder and dispose of as usual. Clean subsequently and prevent the development of dust.

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7. Handling and storage

Handling: The product is only for dental use.

- **Information about safe handling:** No special measures are required.
- **Information about protection against explosion and fire:** No special measures are required.

Storage:

- **Information about storage:** Store dry and tightly closed in original container.
- **Information about storage in one common storage facility:** Not required.
- **Requirements for storage rooms:** No special requirements.

8. Exposure controls and personal protection

Data on limiting values that require monitoring at the workplace:

Ingredients with limiting values that require monitoring at the workplace		
1314-13-2	Zinc Oxide	(EU-No.: 215-222-5)
TLV	1 A mg/m ³	smoke; DFG
1309-48-4	Magnesium Oxide	(EU-No.: 215-171-9)
TLV	6 A mg/m ³	smoke; DFG
7789-75-5	Calcium Fluoride	(EU-No.: 232-188-7)
TLV	2,5 E mg/m ³ as F	DFG

Technical protective measures: not required.

Notice: When used according to regulations, no smoke containing zinc is released.

Personal protective equipment

Respiratory protection: Not required.

Skin protection: Not required necessarily; the glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to absent tests no recommendations about the glove material can be given for the product/the preparation/the chemical mixture. The selection of the glove material should be in consideration of the breakthrough time, kinds of permeation and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on material but also on further quality characteristics and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has to be checked prior to the application.

Penetration time of glove material: The exact breakthrough time is to be obtained from the manufacturer of the protective gloves and has to be observed.

For the permanent contact in application areas without increased risk of injury (e. g. lab) gloves made of the following materials are suitable:

Natural rubber (Latex).

For the permanent contact of a maximum of 15 minutes gloves made of the following material are suitable:

Natural rubber (Latex).

Eye protection: Recommended: Protective goggles with side protection.

Body protection: Lightweight protective clothing.

General protective and hygienic measures:


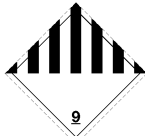
The usual precautionary measures for contact with chemicals are to observe.

9. Physical and chemical properties

General information:	
Form:	Powder
Colour:	Whitish
Odour:	Odourless
Change in state	
Boiling point/boiling range:	Not applicable
Melting point/melting range:	> 1.200 °C
Flashpoint:	Not applicable
pH-value:	Not applicable
Autoflammability:	Product does not self ignite
Danger of explosion:	Product is not explosive
Bulk density:	500 kg/cm ³

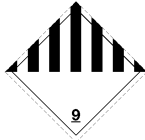
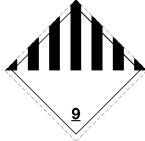
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	Solubility in water: Insoluble
	Solvent content: Organic solvents: 0,0 %
10. Stability and reactivity	
Conditions to be avoided: Hazardous reactions: Hazardous decomposition products:	No decomposition when used according to regulations. No hazardous reactions are known. No hazardous decomposition products are known.
11. Toxicological information	
Values given below refer to basic substance Zinc Oxide.	
From subacute to chronic toxicity : Sensitisation: Mutagenicity Test: Ames-Test:	<u>Research on human:</u> no sensitising effect Negative; no mutagenic effect.
Additional toxicological information:	In our experience and according to the literature provided to us the product does not cause any noxious effects when used and handled according to regulations.
12. Ecological information	
Referring to main substance: Biological decomposition: Ecotoxicological information: Biological effects: General information:	Is not determined. Quantitative data about ecological effects are not available for this product. Very toxic to aquatic organisms. May cause long-term harmful effects in the waters. Prevent releasing into waters, sewage system and soil. Water hazard class 2 (self-assessment): hazardous to waters.
13. Disposal details	
	Product: Do not dispose of together with domestic waste. Prevent releasing into sewage system. Uncleaned packaging: Dispose of in accordance with official regulations.
European Waste Catalogue	
18 01 06 Chemicals containing or consisting of hazardous substances	
14. Transport information	
Land transport ADR/RID and GGVS/GGVE (cross-border/national):	
	
ADR/RID-GGVS/E class: Kemler-Number: UN-Number: Packaging group: Hazard label:	9 (M7) Miscellaneous hazardous substances and items 90 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE III 9

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Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)
Maritime transport IMDG/GGV sea:  IMDG/GGV sea class: 9 UN-Number: 3077 Label: 9 Packaging group: III EMS-Number: F-A, S-F MARINE POLLUTANT: YES Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)
Air transport ICAO-TI and IATA-DGR :  ICAO / IATA class: 9 UN/ID Number: 3077 Label: 9 Packaging group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)

15. Regulations

Labelling according to EU-Directive:

The product has been classified and labelled in accordance with EU-Directives / Ordinance on Hazardous Materials (GefStoffV).

Labels:



N Hazardous to the environment

Risk phrases: 50/53 Very toxic to aquatic organisms, may cause long-term harmful effects in waters.

Safety phrases: 57 Use appropriate container to avoid environmental contamination.

National regulations:

Water hazard class: 2 (hazardous to waters), self-assessment.

16. Other information

This information is based on our present level of knowledge. However, they do not represent a guarantee for any product features and do not establish a contractual relationship. It is to emphasize that there are no warnings at all about human health risks by Zinc Oxide as far as the product is used according to regulations.

Department issuing MSDS: Quality assurance department