according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

Reviewed on: 18 June 2012

1. Identification of substance and manufacturer's name

Product details/Trade name:



HOFFMANN'S CARBOXYLAT CEMENT, Liquid

Manufacturer/Supplier:

Wangenheimstr. 37/39, D-14193 Berlin Telephone: +49 (0) 30 / 82 00 99 0 Fax: ++49 (0) 30 / 82 28 145

Information department/Emergency information:

Quality assurance department

e-mail: sicherheit@hoffmann-dental.com

2. Composition/Data on ingredients

Chemical characterization:

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

Gefährliche Inhaltsstoffe	:		
CAS 9003-01-4	Polyacrylic acid	Warning; H315,	40%
		H319, H335	
		Xi; R 36/37/38	

3. Hazards identification

Hazard designation:

Xi Irritant

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.

H315: Causes skin irritation.
H319: Causes serious eye irritation
H335: May cause respiratory irritation

R36/37/38: Irritating to eyes, respiratory system and skin

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

General warnings: Remove contaminated clothing immediately.

- After skin contact: Remove by washing with soap under the running water. Generally the product is not

irritating to skin.

- After eye contact: Immediately flush opened eye under running water for several minutes, consult an eye

specialist.

- **After swallowing**: (A plenty of substance) induce vomiting and consult a physician.

- After inhaling: Not applicable.

5. Fire fighting measures

Suitable extinguishing agents: Adapt to the environment.

Special protective equipment: No special measures required.

Special information: None.

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6. Accidental release measures

Person-related safety precautions:No special measures are required.

Environmental precautions: Prevent spillage of large product amounts from entering waters and

sewage system. Dilute with plenty of water.

Methods of cleaning up: Absorb with liquid binding material (chemical binders; use cellulose for

small amounts). Remove the remainders with water and detergents.

7. Handling and storage

Handling: The product is only for dental use. - **Information for safe handling:** Keep containers tightly closed.

- Information about protection

against explosion and fire:No special measures are requires.

Storage:

- Information about storage: Store dry and tightly closed in original container; frost-free and not above

25 °C.

- Information about storage in

one common storage facility: Nor 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		
None	None	
TLV	Not applicable	

Technical protective measures: Not required.

Personal protective equipment: Respiratory protection: Not required.

Skin protection: Wear suitable protective gloves; 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. Suitable glove material is e. g. butyl rubber, fluorocarbon rubber (Viton), natural rubber (Latex). For the permanent contact of a maximum of 15 minutes gloves made of PVC or PE are suitable.

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.

Eye protection: Protective goggles with side protection are recommended.

Body protection: Lightweight protective clothing. **General protective and hygienic measures:**

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

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9. Physical and chemical properties

General information:	
Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Change in state	
Boiling point/boiling range:	not determined
Melting point/melting range:	not determined
Flashpoint:	not applicable
pH-value:	1,5 – 2,5
Autoflammability:	Product does not self ignite
Danger of explosion:	Product is not explosive
Density at 20 °C:	1,1800 g/cm ³
Solubility in water:	fully miscible
Solvent content:	
Organic solvents:	0,0 %
Water:	60 %
VOC EU:	0,0 %

10. Stability and reactivity

Conditions to be avoided:No decomposition when used according to the regulations.

Hazardous reactions: No hazardous reactions are known when used according to regulations.

Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information

Acute toxicity: Owing to the operational experience the product does not cause any noxious effects when used handled according to regulations.

Primary skin irritation effect:

- Skin: No irritation
- Eye: No irritation

The product must not be labelled according to the calculation method of the ""EU-Directive of the General Classification of Preparations" in the latest version.

12. Ecological information

Referring to main substance:

Biological decomposition: Is not determined.

Ecotoxicological information: Quantitative data about ecological effects are not available for this

product.

Biological effects: Not determined.

 $\textbf{General information:} \qquad \qquad \text{Water hazard class 1 (self-assessment): slight hazardous to waters.}$

13. Disposal details

Product: Small amounts can be disposed of together with domestic waste.

Large amounts must be disposed of according to official regulations.

European Waste Catalogue		
18 01 04	Waste, whose collection and disposal is not subject to special requirements in order to prevent infection	

according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

14. Transport information

Land transport ADR/RID:Not indicated as an hazardous substance.Maritime transport IMDG/GGV sea:Not indicated as an hazardous substance.Air transport IATA-DGR:Not indicated as an hazardous substance.

Not dangerous according to all transportation regulations.

15. Regulations according to GHS

Signal word: Warning

Hazard pictogram:



Hazard Statements:

H315: Causes skin irritation.

H319: Causes serious eye irritation

H335: May cause respiratory irritation

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

P337 + P313: If eye irritation persists get medical advice/attention

16. Regulations

Labelling according to the EU-Directive:

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

Labels:



Irritant

Risk phrases: R36/37/38: Irritating to eyes, respiratory system and skin

Safety phrases: S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

National regulations:

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

17. Other information

This information is based on our present knowledge. However, they do not represent a guarantee for any product features and do not establish a contractual relationship.

Department issuing MSDS: Quality assurance department

according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

Reviewed on: 12 June 2012

1. Identification of substance and manufacturer's name

Product details/Trade name:



HOFFMANN'S CARBOXYLATE CEMENT, POWDER

Manufacturer/Supplier:

Wangenheimstr. 37/39, D-14193 Berlin Telephone: +49 (0) 30 / 82 00 99 0 Fax +49 (0) 30 / 82 28 145

Information department/Emergency information:

Quality assurance department

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	Warning; H410 N: R 50/53	80 - 90 %
CAS: 1309-48-4 EINECS: 215-171-9	Magnesium Oxide	,	5 - 10 %

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.

H410: Very toxic to aquatic life with long lasting effects.

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:
 After swallowing:
 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 required.

6. Accidental release measures

Person-related safety precautions: Prevent 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.

according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

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 try and tightly closed in original container.

- Information about storage in one common storage facility:

Is not required.

- Requirements for storage rooms: No special measures are required.

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.: 215-2	222-5)
TLV		1 A mg/m³	smoke; DFG
1309-48-4	Magnesium Oxide	(EU-No.: 215-17	71-9)
TLV	6 A mg/m ³	\$	smoke; 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 material 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.

according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

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/m ³
Solubility in water:	Insoluble
Solvent content:	
Organic solvents:	0,0 %

10. Stability and reactivity

Conditions to be avoided:No decomposition when used according to the regulation.

Hazardous reactions: No dangerous reactions known.

Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information

Values given below refer to basic substance Zinc Oxide

From subacute to chronic toxicity:

Sensitisation: Research on human: no sensitising effect Mutagenicity Test: Ames-Test: 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: Is not determined.

Ecotoxicological information: Quantitative data about ecological effects are not available for this

product.

Biological effects: Very toxic to aquatic organisms. May cause long-term harmful effects in

the waters.

General information: 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.

Do not allow product to reach sewage system.

Uncleaned packaging: Dispose of in accordance with official regulations.

European Waste Catalogue

18 01 06 Chemicals containing or consisting of hazardous substances

according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

14. Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/national):



ADR/RID-GGVS/E class: 9 (M7) Miscellaneous hazardous substances and items

Kemler-Number: 90

UN-Number: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE

Packiaging group: III
Hazard label: 9

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (ZINC OXIDE)

Maritime transport IMDG 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 according to GHS

Signal word: WARNING Hazard pictogram:



Hazard Statements: H410: Very toxic to aquatic life with long lasting effects

Precautionary Statements: P273: Avoid release to the environment

according to 1907/2006/EC, Article 31 Hoffmann Dental Manufaktur GmbH

16. Regulations

Labelling according to EU guideline:

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 the waters.

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

National regulations:

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

17. Other information

This information is based on our present 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