

# Material Safety Data Sheet

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

Reviewed on 08 July 2005

|                                                                                                                                                                                                                                  |            |                                                                                                                           |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>1. Identification of substance and manufacturer's name</b>                                                                                                                                                                    |            |                                                                                                                           |           |
| <b>Product details/Trade name:</b><br><b>Hoffmann´s GUTTAPERCHA</b>                                                                                                                                                              |            |                                                                                                                           |           |
| <b>Manufacturer/Supplier:</b><br>Wangenheimstr. 37/39, D-14193 Berlin<br>Telephone +49 (0) 30 / 85 10 27 3<br>Fax +49 (0) 30 / 82 28 145                                                                                         |            |                                                                                                                           |           |
| <b>Information department / Emergency information:</b><br>Quality assurance department, telephone: ++49 (0) 30 / 85 10 27 3                                                                                                      |            |                                                                                                                           |           |
| <b>2. Composition / Data on ingredients</b>                                                                                                                                                                                      |            |                                                                                                                           |           |
| <b>Chemical characterization:</b><br><b>Description:</b> Mixture of below-mentioned substance with innocuous additions.                                                                                                          |            |                                                                                                                           |           |
| <b>Hazardous ingredients:</b>                                                                                                                                                                                                    |            |                                                                                                                           |           |
| CAS: 1314-13-2                                                                                                                                                                                                                   | Zinc Oxide | N; R 50/53                                                                                                                | 80 – 90 % |
| EINECS: 215-222-5                                                                                                                                                                                                                |            |                                                                                                                           |           |
| <b>3. Hazard identification</b>                                                                                                                                                                                                  |            |                                                                                                                           |           |
| <b>Hazard designation:</b><br>N Hazardous to environment.                                                                                                                                                                        |            |                                                                                                                           |           |
| <b>Special danger warning for human and environment:</b><br>This product has to be labelled do to the calculation procedure of the „EU-Directive of the General Classification of the Preparations“ in the latest valid version. |            |                                                                                                                           |           |
| R 50/53: Very toxic to aquatic organisms may cause long-term harmful effects in the waters.                                                                                                                                      |            |                                                                                                                           |           |
| <b>Classification system:</b><br>The classification is in compliance with the current EU-lists, but is also completed with details given by technical literature and company.                                                    |            |                                                                                                                           |           |
| <b>4. First aid measures</b>                                                                                                                                                                                                     |            |                                                                                                                           |           |
| - <b>After inhaling:</b> Not applicable, because of solid material.                                                                                                                                                              |            |                                                                                                                           |           |
| - <b>After skin contact:</b> Not applicable.                                                                                                                                                                                     |            |                                                                                                                           |           |
| - <b>After eye contact:</b> Not applicable.                                                                                                                                                                                      |            |                                                                                                                           |           |
| - <b>After swallowing:</b> (A plenty of substance) In case of feeling unwell consult a physician.                                                                                                                                |            |                                                                                                                           |           |
| <b>5. Fire fighting measures</b>                                                                                                                                                                                                 |            |                                                                                                                           |           |
| <b>Suitable extinguishing agents:</b>                                                                                                                                                                                            |            | Adapt to the environment.                                                                                                 |           |
| <b>Special protective equipment:</b>                                                                                                                                                                                             |            | Staying in dangerous area only with a self-contained breathing apparatus.                                                 |           |
| <b>Other information:</b>                                                                                                                                                                                                        |            | Prevent any spillage of water for fire-fighting from entering surface or ground waters. No special measures are required. |           |
| <b>6. Accidental release measures</b>                                                                                                                                                                                            |            |                                                                                                                           |           |
| <b>Person related safety precautions:</b>                                                                                                                                                                                        |            | Not required.                                                                                                             |           |
| <b>Environmental precautions:</b>                                                                                                                                                                                                |            | Prevent any spillage from entering the sewage system.                                                                     |           |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <b>Methods of cleaning up:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Pick up mechanically.            |
| <b>7. Handling and storage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  |
| <b>Handling:</b> The product is only for dental use.<br>- <b>Information about safe handling:</b> No special measures are required.<br>- <b>Information about protection against explosion and fire:</b> No special measures are required.<br><br><b>Storage:</b><br>- <b>Information about storage:</b> Store tightly closed and dry in original container.<br>- <b>Information about storage in one common storage facility:</b> Not required.<br>- <b>Requirements for storage rooms:</b> No special requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                  |
| <b>8. Exposure control and personal protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |
| <b>Data on limiting values that require monitoring at the workplace:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                  |
| <b>Ingredients with limiting values that require monitoring at the workplace:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                  |
| 1314-13-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Zinc Oxide (EU-No.: 215-222-5)   |
| TLV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1 A mg/m <sup>3</sup> smoke; DFG |
| <b>Technical protective measures:</b> Not required.<br><b>Notice:</b> When used according to regulations, no smoke containing zinc is released.<br><b>Personal protective equipment</b><br><b>Respiratory protection:</b> Not required.<br><b>Skin protection:</b> 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.<br><b>Material of gloves:</b> 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.<br><b>Penetration time of glove material:</b> The exact breakthrough time is to be obtained from the manufacturer of the protective gloves and has to be observed.<br><b>Eye protection:</b> Recommended: Protective goggles with side protection.<br><b>Body protection:</b> Lightweight protective clothing.<br><b>General protective and hygienic measures:</b> The usual precautionary measures for contact with chemicals are to observe. |                                  |
| <b>9. Physical and chemical properties</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                  |
| <b>General information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |
| <b>Form:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Solid                            |
| <b>Colour:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Whitish                          |
| <b>Odour:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Odourless                        |
| <b>Change in state</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                  |
| <b>Softening point:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Approximately at 65 °C           |
| <b>Boiling point/boiling range:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Not determined                   |
| <b>Flashpoint:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Not applicable                   |
| <b>pH-value:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | not                              |
| <b>Autoflammability:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Product does not self-ignite     |
| <b>Danger of explosion:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Product is not explosive         |
| <b>Bulk density:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Not applicable                   |
| <b>Solubility in Water:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Insoluble                        |

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## 10. Stability and reactivity

**Conditions to be avoided:** No decomposition when used according to the regulation.  
Do not heat above 80 °C.  
**Hazardous reactions:** No hazardous reactions are 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 relating to the available information the product does not cause any noxious effects when used and handled according to regulations.

## 12. Ecological information

### Referring to main substance:

**Biological decomposition:** 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.**

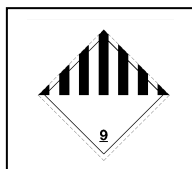
Prevent releasing into sewage system.

Uncleaned packaging:

Dispose of in accordance with official regulations.

## 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

**Packaging group:** III

**Hazard label:** 9

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

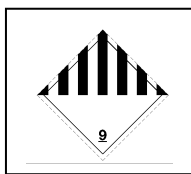
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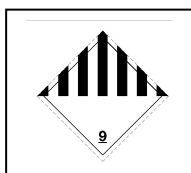
N.O.S. (ZINC OXIDE)

## 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.  
60-61 This material and its container are to dispose of as hazardous waste; prevent releasing into the environment.

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

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## 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