

# Material Safety Data Sheet

## According to 91/155 EC

Printing date 10.03.2004

Reviewed on 24.01.2003

### 1 Identification of substance:

· **Product details:**

· **Trade name:** Kalzinol Powder

· **Application of the substance / the preparation** Zinc eugenol cement

· **Manufacturer/Supplier:**

DENTSPLY DeTrey GmbH

De-Trey-Str. 1

D-78467 Konstanz

GERMANY

Tel.:

+49-7531-583-0

Fax:

+49-7531-583-104

· **Further information obtainable from:**

- *Departement Analytical Research / Research & Development for* technical information

- *Departement Marketing & Sales for distribution of the safety data* sheets

### 2 Composition/Data on components:

· **Chemical characterization:**

· **CAS No. Description:**

1314-13-2 zinc oxide 50 - 100 %

· **Identification number(s):**

· **EINECS Number:** 2152225

### 3 Hazard identification

· **Hazard description:**

N Dangerous for the environment

· **Information concerning to particular hazards to man and environment**

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

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 4 First aid measures

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After skin contact** Generally the product does not irritate the skin.

· **After eye contact** Rinse opened eye for several minutes under running water.

· **After swallowing** Void

### 5 Fire fighting measures

· **Suitable extinguishing agents**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Protective equipment:** No special measures required.

### 6 Accidental release measures

· **Person-related safety precautions:**

Avoid formation of dust.

Wear protective clothing.

· **Measures for environmental protection:**

Inform respective authorities in case of seepage into water course or sewage system.

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- **Measures for cleaning/collecting:** Pick up mechanically.

### 7 Handling and storage

- **Handling** Product is intended for dental use only.
- **Information for safe handling:** Observe normal care for working with chemicals.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

### 8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

1314-13-2 zinc oxide

OEL	Short-term value: 10 mg/m <sup>3</sup> Long-term value: 5 mg/m <sup>3</sup>
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- **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.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.
- **Body protection:** Protective work clothing.

### 9 Physical and chemical properties:

- **General Information**

<b>Form:</b>	Powder
<b>Colour:</b>	White
<b>Odour:</b>	Odourless

- **Change in condition**

<b>Melting point/Melting range:</b>	undetermined
<b>Boiling point/Boiling range:</b>	undetermined

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Product is not flammable.

- **Self-igniting:** Product is not selfigniting.

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- |  |   |
|--|---|
| · <b>Danger of explosion:</b>                    | Product does not present an explosion hazard. |
| · <b>Density:</b>                                | Not determined                                |
| · <b>Solubility in / Miscibility with Water:</b> | Insoluble                                     |

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous decomposition products:** No dangerous decomposition products known

### 11 Toxicological information

- **Acute toxicity:**
  - **LD/LC50 values relevant for classification:**
- |                      |                        |
|----------------------|------------------------|
| 1314-13-2 zinc oxide |                        |
| Oral                 | LD50 >5000 mg/kg (rat) |
- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.

### 12 Ecological information:

- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **General notes:**  
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water.  
Also poisonous for fish and plankton in water bodies.  
Very toxic for aquatic organisms

### 13 Disposal considerations

- **Product:**
- **Recommendation**



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 9 (M7) Miscellaneous dangerous substances and articles.

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- **Danger code (Kemler):** 90
- **UN-Number:** 3077
- **Packaging group:** III
- **Hazard label** 9

- **Maritime transport IMDG:**



- **IMDG 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 guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:**



N Dangerous for the environment

- **Risk phrases:**

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

57 Use appropriate container to avoid environmental contamination.  
60 This material and its container must be disposed of as hazardous waste.

- **National regulations**

- **Technical instructions (air):**

Class	Share in %
II	0.2

- **Waterhazard class:** Water hazard class 2 (Assessment by list): hazardous for water.

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**16 Other information:**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Department issuing MSDS:** Analytical Research
- **Contact:** HotLine for urgent technical support: +49-7531-583-333

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