

# MATERIAL SAFETY DATA SHEET

According to (EG) 1907/2006 (REACH)

**ERNST HINRICHS GmbH**



**ERNST HINRICHS GmbH**  
Dental- und Gipspräparate

Date of printing: 21.10.2009

reviewed on: 21.10.2009

Page: 1 / 4

## Duplicating silicones

### 1. Identification of the Substance / Preparation and Company:

Identification of the substance or preparation: Addition-curing duplicating silicone  
Commercial product name: Hinrisil, Hinrisil KL, Hinrisil Speed, Hinrisil hydro  
Company / Manufacturer: ERNST HINRICHS GmbH  
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### 2. Hazards Identification:

Adverse human health effects: Slightly irritating to eyes  
Environmental effects: Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.  
Physical and chemical hazards: Combustible liquid. Explosive vapour/air mixtures may be formed above 200°C.  
Classification/Specific hazards: According to EEC criteria, this product is not classified as a „hazardous preparation“.

### 3. Composition / Information on Ingredients:

3.1 Chemical characterization (substance): Polyorganosiloxanes with functional groups + auxiliaries for addition cross-linking

3.2 Components contributing to the hazard:

EG-No.	CAS-No.	Substance	Concentration %	Attributes (EG)
238-878-4	14808-60-7	Quarz	from: – to: <5,0	symbols: Xn R- phrase 48/20

R-phrase	Description
R48/20	Harmful: Danger of serious damage to health by prolonged exposure through inhalation.

### 4. First aid measures:

4.1 General advice: Inhalation is no primary way of exposition, the measure mentioned in 4.2 is a general advice.  
4.2 After inhalation: Step outside and inhale fresh air. Consult a doctor in case of sickness.  
4.3 After contact with the skin: Wipe off with flanel or paper and rinse with soap and water additionally.  
4.4 After contact with the eyes: Rinse immediately with plenty of water. Seek medical advice in case of continuous irritation.  
4.5 After swallowing: Consult a doctor in case of sickness (show the product label if possible).

### 5. Fire Fighting measures:

5.1 Suitable extinguishing media: Foam, powders, carbon dioxide (CO<sub>2</sub>), foam, powders, water spray.  
5.2 Extinguishing media which must not be used for safety reasons: None to our knowledge. If there is a fire close by, use suitable extinguishing agents.  
5.3 Special hazards: Combustible liquid. When product is thermal decomposed or combusted: Toxic and flammable vapours are released (explosion hazard!).  
5.4 Special protective equipment for fire fighting: Wear a self-contained breathing apparatus and well-sealed

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Page: 2 / 4

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protective clothing. Water for fire-fighting should be caught and disposed of.

### 6. Accidental release measures:

- |     |                            |   |
|-----|----------------------------|---|
| 6.1 | Personal precautions:      | safety glasses  |
| 6.2 | Environmental precautions: | Observe local bye-laws  |
| 6.3 | Methods for cleaning up:   | Absorb mechanically and dispose of according to regulations.<br>Absorb with a liquid binding material such as diatomaceous earth and dispose of according to regulations. |

### 7. Handling and Storage:

- |     |  |   |
|-----|--|---|
| 7.1 | Handling:                                    |   |
|     | Precautions for safe handling:               | Ensure adequate ventilation.  |
|     | Precautions against fire and explosion:      | Product can separate hydrogen. In partly emptied containers liberation of explosive gases is possible.                          |
| 7.2 | Storage:                                     |   |
|     | Conditions of storage rooms and vessels:     | -   |
|     | Advice of storage of incompatible materials: | -   |
|     | Further information for storage:             | Protect against moisture. Store in original container only. Keep container tightly closed and store in a well-ventilated place. |

### 8. Exposure controls / Personal protection:

- |     |   |   |
|-----|---|---|
| 8.1 | Further information for system design and engineering measures: | Not applicable                                  |
|     | Limits (U.S.A./A.C.G.I.H.):                                     | TLV (TWA): 0,1 mg/m <sup>3</sup> (for platinum) |
|     | Personal protection equipment :                                 |   |
|     | General protection and hygiene measures:                        | No special hygiene measures required            |
|     | Respiratory protection:   | not required.                                   |
|     | Hand protection:  | not required.                                   |
|     | Eye protection:   | Goggles   |
|     | Skin protection:  | not required.                                   |
|     | Hygiene measures:   | Do not drink, eat or smoke in the workplace.    |

### 9. Physical and chemical properties:

- |                            |   |
|----------------------------|---|
| Form:                      | liquid  |
| Colour:                    | transparent or pigmented  |
| Odour:                     | Odourless   |
| Decomposition temperature: | > 200 °C  |
| Flash point:               | > 200 °C  |
| Ignition temperature:      | > 400 °C  |
| Oxidizing properties:      | Non oxidizing material according to EEC criteria  |
| Vapour pressure:           | <0.01 kPa at 20°C   |
| Specific gravity:          | 1.05 g/cm <sup>3</sup> at 25°C  |
| Solubility:                |   |
| - in water:                | Practically insoluble   |
| - in organic solvents:     | Dispersible (partial solubilisation) in:<br>diethylether, chlorinated solvents, aromatic hydrocarbons (toluene, xylene), aliphatic hydrocarbons |
| Viscosity:                 | approx. 5000 mPa  |

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Page: 3 / 4

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### 10. Stability and Reactivity:

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- 10.1 Stability: Stable at room temperature
- 10.2 Hazardous reactions:  
Materials to avoid: strong oxidizing agents  
Hazardous decomposition products: On combustion or on thermal decomposition (pyrolysis) releases: flammable vapours which may generate fire or explosion hazards. Toxic gases (Carbon oxides (CO + CO<sub>2</sub>)).

### 11. Toxicological Information:

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- 11.1 Acute toxicity:  
LD 50 skin (Rat): >2000mg/kg.  
LD 50 oral (Rat): >2000mg/kg.
- 11.2 Local effects: may cause temporary irritation to ocular mucous membranes.

### 12. Ecological Information:

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- 12.1 Information on elimination:  
(persistence and degradability):  
Biodegradation / further information: Biologically not degradable. Polydimethyl siloxanes are degradable to a certain extent in abiotic processes.
- 12.2 Behaviour in environmental compartments:  
Further information: Bioaccumulation improbable
- 12.3 Ecotoxicological effects: According to past experience toxicity to fish is improbable
- 12.4 Effects in sewage treatment plants  
(bacteria toxicity: respiration-  
/reproduction inhibition): According to present experience, no adverse effects on water purification plants

### 13. Disposal Considerations:

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- 13.1 Waste from residues: Prohibition: Do not discharge waste into drains.  
Destruction/Disposal: Dilute with a flammable solvent and incinerate at a licensed installation. Dispose of at a licensed waste collection point. Un-vulcanized product: Vulcanized product: May be disposed of with non hazardous industrial waste.
- 13.2 Contaminated packaging: Decontamination/cleaning: Allow it to drain thoroughly. Rinse with an appropriate solvent. Recover the solvent used for rinsing and incinerate at a licensed site. Entrust the thoroughly decontaminated packaging to a licensed waste-contractor.  
Dispose of at an approved site
- Note: The user's attention is drawn to the possible existence of local regulations regarding disposal.

### 14. Transport Information:

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- Land transport GGVS/ADR and GGVE/RID:  
Road GGVS/ADR: Valuation - Non-hazardous material  
Railway GGVE/RID: Valuation - Non-hazardous material  
Express – permitted
- Inland navigation GGVBinsch/ADNR  
Transport by sea GGVSee/IMDG-Code: Valuation - Non-hazardous material
- Air transport ICAO-TI/IATA-DGR : Valuation - Non-hazardous material

### 15. Regulatory Information:

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- Labelling:  
EEC regulations: Mandatory labelling (self-classification) of hazardous preparations:  
Not applicable

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Page: 4 / 4

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### **16. Further Information:**

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The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet.