

EG-MATERIAL SAFETY DATA SHEET



according to (EG) 1907/2006 (REACH)
Date of issue: 8-Sep-14

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replaced copy from: 02.02.2011

Phosphate bound dental investment

1. Identification of the Substance / Preparation and company:

Identification of the substance or preparation:

Commercial product name: Hinrivest KB, Hinrivest SG, Hinrivest CoCr, Hinrivest Press
Phosphate bound dental investment

Company / Manufacturer: ERNST HINRICHS GmbH
Borsigstr. 1
DE – 38644 Goslar
00 49 (0) 53 21 / 5 06 24 / 25
00 49 (0) 53 21 / 5 08 81
ERNST HINRICHS GmbH

2. Composition / Information on Ingredients:

- 2.1 Description: Quartz- and cristobalite powder, ammonium phosphate and magnesium oxide.
- 2.2 Hazardous substances: Quartz (CAS-No. 14808-60-7) and cristobalite (CAS-No.: 14464-46-1) as fine dust

3. Hazards Identification:

Special hazards for human and environment: Harmful to health on inhalation; contains silicogenous dust, long-term effect by inhalation can trigger lung disease.

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: Move affected person to fresh air. If symptoms persist please seek medical advice.

After contact with the skin: Wash off with warm water.

After contact with the eyes: Rinse open eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out the mouth and drink plenty of water afterwards. If symptoms persist consult a doctor.

5. Fire Fighting measures:

- 5.1 Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with foam.
- Special protective equipment: No special measurements required.

6. Accidental release measures:

- 6.1 Person-related safety precautions: Avoid dust formation. Wear protective clothing.
- Measures for environmental protection: No special measures required.
- Measures for cleaning / collecting: Pick up mechanically.

7. Handling and Storage:

- 7.1 Handling:
Information for safe handling: Avoid dust formation. Ensure good ventilation / exhaust at the workplace, use suction.
- Information about fire- and explosion protection: The product is not flammable.
- 7.2 Storage:
Requirements to be met by storerooms and containers: Store in cool and dry in closed, original containers.

8. Exposure controls / Personal protection:

- 8.1 Technical measures: Use suction in the workplace. Destroy muzzles after pouring under special dust-protection measures, e.g. flowing water.
Open sachet with scissors to prevent dust.

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- 8.2 Components with critical values that require monitoring at the workplace: 14808-60-7 Quartz (50 - 100%) MAK 0,15F mg/m³
1309-48-4 Magnesium oxide (fume) (10 - 25%) MAK 6F mg/m³
- 8.3 Additional information: The lists valid during compilation were used as a basis.
General protective and hygienic measures: The product should be handled with the usual care when working with chemicals. Wash hands before breaks and at the end of work.
Avoid eye contact.
Respiratory protection: Use respiratory protective device, filter F2.

9. Physical and chemical properties:

Form:	Powder
Colour:	White
Odour:	Odourless
Melting point:	> 1.400 ⁰ C
Danger of explosion:	The product is not combustible.
Bulk density:	1.100 - 1.200 kg/m ³
Water solubility:	insoluble in bound form
pH-Value (10g/1) at 20°C:	approx. 6
Further information:	Powder is hygroscopic, absorbs water and hardens on exposure to heat like plaster. On heating > 250 ⁰ C, decomposition with fissure of approx. 1% weight ammonia.

10. Stability and Reactivity:

Thermal decomposition:	No decomposition if used according to specifications.
Conditions to be avoided:	Not applicable.
Dangerous reactions:	None known.
Hazardous decomposition products:	No dangerous decomposition products. Formation of ammonia on heating the bound imbedded mass in the top of a pre-heated oven at approx. 250 ⁰ C. Aspirate vapour from pre-heated oven and release into the air without any risk.

11. Toxicological Information:

Acute toxicity:	
On the skin:	No irritation.
On the eye:	Slightly irritant effect.
Sensitization:	No sensitizing effects known.
Sub acute / chronic toxicity:	Do not breathe dust. Due to the quartz components harmful by inhalation, irreversible risks are possible.

12. Ecological Information:

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- 12.1 Information about elimination (persistence and degradability):
General notes: Inorganic salts are on principle non-biodegradable. Validation: easily eliminated. Elimination by flocculation or adsorption to sludge.
- Ecotoxic effect:
Additional information: No CSB, no BSB, no AOX.

13. Disposal Considerations:

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- 13.1 Product - Small amounts can be disposed of with the household garbage.
Recommendation:
European Waste Catalogue: 31442 Silica and quartz waste
Uncleaned packaging – Disposal must be made according to official regulations.
Recommendation:

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14. Transport Information:

This product is not subject to the regulations for the transport of dangerous goods.

15. Regulatory Information:

Labelling according to EU guidelines: The product should be handled with the usual care when working with chemicals. The product must not be labelled according to EC-regulations.

Water hazard class: 1 - Slightly hazardous to water.

16. Further Information:

Training information / instructions: Training on correct dust protection is required.

Recommended use / limitations: Open sachet with scissors to avoid dust formation.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not constitute any guarantee as regards product characteristics.