

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

Version number 2


Revision: 28.10.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Deguvest, Optivest, Biosint, LUKAVest
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Application of the substance / the mixture:** Investment for dental applications
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
emwerk GmbH
Bürgermeister-Otto-Knapp-Straße 49
49163 Bohmte
GERMANY
info@emwerk.de
+ 49 (0) 5471 / 9515010
- **Further information obtainable from:** Quality assurance
- **1.4 Emergency telephone number:**
+49 (0) 5471 9515010 (Mo-Fr 08:00AM - 05:00PM)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008:**
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008:**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms:**

GHS08
- **Signal word:** Warning
- **Hazard-determining components of labelling:**
Quartz (SiO₂)
- **Hazard statements:**
H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Precautionary statements:**
P260 Do not breathe dust.
P270 Do not eat, drink or smoke when using this product.
P285 In case of inadequate ventilation wear respiratory protection.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents / container in accordance with local / regional / national / international regulations.
- **Information concerning particular hazards for human and environment:**
Contains quartz. Do not breathe dust. May cause lung injury (silicosis / lung cancer). Wear protection mask.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

GB

(Contd. on page 2)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

Version number 2

Revision: 28.10.2024

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 14808-60-7 EINECS: 238-878-4	Quartz (SiO ₂)	STOT RE 2, H373	50 - 90%
CAS: 14464-46-1 EINECS: 238-455-4	crystalobalite	STOT RE 2, H373	1-30%

· **SVHC**

· **Non-dangerous ingredients**

CAS: 1309-48-4 EINECS: 215-171-9 Index number: 025-199-09-0	magnesium oxide	1-20%
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· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:**

Take affected persons out into the fresh air.
Position and transport stably in side position.
In case of troubles or persistent symptoms, consult an medical.

· **After inhalation:**

Take affected persons into fresh air and keep quiet.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Call a doctor immediately.

· **After skin contact:** Wash with water and soap.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.
In case of troubles, consult an medical.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media** The product itself does not burn.

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid formation of dust.
Wear respiratory protection.

(Contd. on page 3)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

Version number 2

Revision: 28.10.2024

(Contd. of page 2)

- **6.2 Environmental precautions**
Do not allow to enter sewers / surface or ground water.
Do not allow to penetrate the ground / soil.
- **6.3 Methods and material for containment and cleaning up**
Pick up mechanically.
Avoid generation of dust.
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation / exhaust at the workplace.
Prevent formation of dust.
Do not breathe dust.
Keep receptacles tightly sealed.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke at the workplace.
Take off immediately all contaminated clothing.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Keep container in a well-ventilated, cool and dry place.
Protect from moisture.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** No information available.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

14808-60-7 Quartz (SiO₂)

MAK (Germany)	alveolengängige Fraktion
BOELV (EU)	Long-term value: 0.1* mg/m ³ *respirable fraction

14464-46-1 cristobalite

MAK (Germany)	alveolar fraction
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1309-48-4 magnesium oxide

WEL (Great Britain)	Long-term value: 10* 4** mg/m ³ (as Mg) *inhalable dust **fume and respirable dust
AGW (Germany)	Long-term value: 1.25* 10** mg/m ³ 2(II);*alveolar**inhalable; AGS, DFG

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.

(Contd. on page 4)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

Version number 2

Revision: 28.10.2024

(Contd. of page 3)

- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
- **Respiratory protection:**
Suitable respiratory protective device recommended.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Hand protection**
The glove material has to be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product. 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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/face protection** Dust protection goggles.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

- | | |
|---|------------------------------|
| · General Information | |
| · Colour: | Depending on type. |
| · Odour: | Odourless or scented. |
| · Melting point/freezing point: | Undetermined. |
| · Boiling point or initial boiling point and boiling range | Undetermined. |
| · Flammability | Not determined. |
| · Flash point: | Not applicable. |
| · Auto-ignition temperature: | Product is not selfigniting. |
| · Decomposition temperature: | Not determined. |
| · pH | Not applicable. |
| · Viscosity: | Not applicable. |
| · Kinematic viscosity | |
| · Dynamic: | Not applicable. |
| · Solubility | |
| · water: | Insoluble. |
| · Vapour pressure: | Not applicable. |
| · Density and/or relative density | |
| · Density: | Not determined. |

· 9.2 Other information

- | | |
|--|---|
| · Appearance: | |
| · Form: | Powder |
| · Important information on protection of health and environment, and on safety. | |
| · Ignition temperature: | Not determined. |
| · Explosive properties: | Product does not present an explosion hazard. |
| · Solvent content: | |
| · Solids content: | 100.0 % |

(Contd. on page 5)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

Version number 2

Revision: 28.10.2024

(Contd. of page 4)

· Information with regard to physical hazard classes	
· Explosives	Void.
· Flammable gases	Void.
· Aerosols	Void.
· Oxidising gases	Void.
· Gases under pressure	Void.
· Flammable liquids	Void.
· Flammable solids	Void.
· Self-reactive substances and mixtures	Void.
· Pyrophoric liquids	Void.
· Pyrophoric solids	Void.
· Self-heating substances and mixtures	Void.
· Substances and mixtures, which emit flammable gases in contact with water	Void.
· Oxidising liquids	Void.
· Oxidising solids	Void.
· Organic peroxides	Void.
· Corrosive to metals	Void.
· Desensitised explosives	Void.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No data available.
- **10.2 Chemical stability** No data available.
- **10.3 Possibility of hazardous reactions** No data available.
- **10.4 Conditions to avoid** Moisture.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products**
While warming up the set investments in a preheating furnace fumes occur: ammonia.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** No data available.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** No data available.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
Contains quartz. Do not breathe dust. May cause lung injury (silicosis / lung cancer). Wear protection mask.
- **11.2 Information on other hazards**

· Endocrine disrupting properties

None of the ingredients is listed.

GB

(Contd. on page 6)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

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Revision: 28.10.2024

(Contd. of page 5)

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
The product may not be released into the environment without control.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:** Waste disposal according to official state regulations.
- **Waste disposal key:**
The waste disposal code as prescribed in the European Waste Catalogue (EWC) depends on the waste producer and can thus vary for a product. The waste disposal code should thus be obtained separately from the waste producer in each case.
- **Uncleaned packaging:**
- **Recommendation:** Dispose unclean packages in compliance with the local, official regulations.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN number or ID number · ADR, IMDG, IATA · ADN 	Void. Void.
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR, IMDG, IATA 	Void.
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG, IATA · Class · ADN/R Class: 	Void. Void.
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	Void.
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: 	No.
<ul style="list-style-type: none"> · 14.6 Special precautions for user 	Not applicable.
<ul style="list-style-type: none"> · 14.7 Maritime transport in bulk according to IMO instruments 	Not applicable.

(Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.10.2024

Version number 2

Revision: 28.10.2024

(Contd. of page 6)

· UN "Model Regulation":	Void.
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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on the state of knowledge and experience pertaining on the date of issue. The information is not to be taken as a guarantee of product properties and do not constitute the basis for a contractual legal relationship. The details must not be changed or transferred to other products. Duplication in an unchanged state is permissible.

- **Relevant phrases**
H373 May cause damage to organs through prolonged or repeated exposure.
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- *** Data compared to the previous version altered.**

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