

EC Safety Data Sheet

BEGO **Bremer Goldschlägerei Wilh. Herbst GmbH & Co.**

Wilhelm-Herbst-Strasse 1
D-28359 Bremen

Telephone: 0421 - 20 28 0
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1. Designation of substance/preparation and company name

Information on the product

Trade name: **Investment material:**

BegoForm[®]	BellaCer	Bellasun[®]	BellaStar	BellaStar[®] XL
Bellatherm[®]	Bellavest[®] SH	Bellavest[®] T	Tancovest[®]	WiroFine
Wiroplus[®]	Wiroplus[®] N	Wiroplus[®] S	Wiroquick	Wirovest[®]

Information on manufacturer/supplier

Manufacturer/supplier:	BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co.
Street/P.O. box:	Wilhelm-Herbst-Strasse 1
Nat./postal code/town:	D-28359 Bremen
Telephone:	0421 – 20 28 0
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Dept. providing information:	Material Development
Emergency telephone:	0421 – 20 28 0

2. Composition / data on components

Chemical characterisation (specific substance)

SiO₂, ammonium dihydrogen phosphate, magnesium oxide, aluminium oxide, inorg. colourings

Chemical characterisation (preparation)

Description: Mixture of quartz and cristobalite sands and powder as well as magnesium oxide, ammonium dihydrogen phosphate, aluminium oxide and inorganic colouring components for use as investment materials in dental technology

Hazardous components: fine quartz dust

3. Possible risks

Special indications of risk for people and environment (possibly R provisions)

Investment material

Harmful if inhaled. Contains silicogenic dust, may lead to silicosis in case of long-term impact due to inhalation.

4. First aid measures

After inhaling

Supply of fresh air or oxygen; in case of long-term impact, obtain medical assistance.

After skin contact

Wash skin with water.

After contact with eyes

Rinse eyes under running water with eyelids open for at least 10 minutes and consult a physician.

After swallowing

Induce vomiting; obtain medical assistance.

5. Fire-fighting measures

Suitable fire extinguishing agents

No restriction in case of fire in surrounding area.

Special hazards due to the substance, its combustion products or resulting gases.

None

6. Measures in case of unintentional release

Personal precautionary measures

Eliminate dust-free

Environmental protection measures

Not applicable

Procedure for cleaning/collecting

Collect mechanically and wipe up with water

7. Handling and storage

Handling

Instructions regarding safe handling:

Conform with customary precautionary measures for handling dust-like materials, comply with dust protection measures.

Instructions on fire and explosion protection:

Not applicable

Storage

Requirements regarding storage rooms and containers:

Store in a cool, dry place. (Room temperature is adequate) Keep containers closed.

Investment material

8. Exposure limitation and personal safety equipment

Additional points regarding design of technical facilities

Open bag with scissors while avoiding dust; use suction extraction system.

Components with workplace-related limit values that must be monitored

CAS number	Designation of substance	Type	Value	Unit	Peak limit cat.
	quartz dust	MPWC	0.15* mg/m ³ *		=1=

*dust fraction capable of penetrating alveolar ducts (= fine dust)

Personal safety equipment

General safety and hygienic measures

Keep away from food.
Do not eat, drink or smoke while working.
Wash hands before breaks and at the end of work.

Breathing protection

Take dust protection measures; ventilate work area well.

Hand protection

Not applicable

Eye protection

Wear safety goggles.

Body protection

Wear work smock.

9. Physical and chemical properties

External characteristics

Form: powder
Colour: white or coloured
Odour: odourless

Safety-related data

pH value: 5-7 (in 80% aqueous solution)
Flash point: not applicable
Risk of explosion: not applicable
Vapour pressure: not applicable
Bulk density: 1.2-1.5 g/cm³ (at room temperature)
Aqueous solubility: insoluble when set
Further information: powder is hygroscopic, absorbs water and hardens under heat development like plaster

Investment material

10. Stability and reactivity

Thermal decomposition:

Not applicable

Conditions to be avoided:

Avoid contact between non-set powder and water before use.

Hazardous decomposition products:

When the set investment material is preheated properly in the preheating furnace, approx. 1% ammonia by weight (MPWC value 14 mg/m³) results. Suction-extract vapours and discharge outdoors.

11. Information on toxicology

Acute toxicity

Not known

Experience with people

Risk of silicosis in the event of long-term effect of dust

12. Information on ecology

Water hazard category: WGK 0 (self-classification)

13. Instructions on disposal

Product

Recommendation:

Allow powder residue to set with water. Set investment material can be disposed of together with domestic waste while complying with the local official regulations.

Packaging

Recommendation:

Rinse out empty foil bags with water to cause adhering dust residues to set.

14. Information on transport

Investment material does not fall under the regulations for hazardous goods in transit.

15. Regulations

Identification in accordance with EC directives

Hazardous components for labelling: Contains quartz dust, please do not inhale.

National regulations

Water endangerment category:

WGK 0 (self-classification)

Investment material

Limit values for exposure at workplace:

MPWC for quartz and cristobalite dust: 0.15 mg/m³ A

MPWC for ammonia (decomposition product): 14 mg/m³

Miscellaneous provisions, restrictions and prohibitory regulations:

The national laws must be complied with for the following substances / components / decomposition products:

fine quartz and cristobalite dust

ammonia as thermal decomposition product

Further national laws may be of significance.

16. Miscellaneous data

Data Sheet issued by:

Material Development Department

Contact

Dr. Martin Schlüter

Revised on: 10/11/2004

Replaces: 11/11/2002

The data provided here describe our product with respect to any safety requirements in accordance with our current know-how and findings. Guarantees regarding qualities or properties cannot be derived from these data.