

Trade name: Bellavest DR (REF 54861, 54862)

Current version: 4.1.0, issued: 10.04.2019 Replaced version: 4.0.0, issued: 05.02.2018 Region: GB

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

#### 1.1 Product identifier

Trade name

## Bellavest DR (REF 54861, 54862)

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

## Relevant identified uses of the substance or mixture

Manufacturing of dental prosthesis in a dental laboratory

#### Uses advised against

No data available.

## 1.3 Details of the supplier of the safety data sheet

#### **Address**

BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG Wilhelm-Herbst-Str. 1 28359 Bremen

Telephone no. +49/ 421/ 2028 – 0 Fax no. +49/ 421/ 2028 – 115 e-mail msds@bego.com

#### Information provided by / telephone

Research & Development Department - Materials, alloys and ceramics; +49/ 421/ 2028 - 130 (Chief Development Officer alloys)

#### **Advice on Safety Data Sheet**

msds@bego.com

#### 1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

#### Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

STOT RE 1; H372i

## Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

## 2.2 Label elements

## Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

## **Hazard pictograms**



GHS08

## Signal word

Danger

#### Hazardous component(s) to be indicated on label:

Quartz (SiO2) cristobalite



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Hazard statement(s)

H372i Causes damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statement(s)

P260 Do not breathe dust.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container to a facility in accordance with local and national

regulations.

#### 2.3 Other hazards

Depending on the handling and use (eg. grinding, drying) formation of airborne respirable crystalline silica is possible. Prolonged and / or massive inhalation of respirable crystalline silica can cause silicosis disease (silicosis). Main symptoms of silicosis are cough and breathing problems / shortness of breath.

In case of irregular exposure to respirable crystalline silica appropriate safety and surveillance measures should exist. The handling of the product should be carried out with special care in order to avoid dust formation.

PBT assessment No data available. vPvB assessment No data available.

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not applicable. The product is not a substance.

#### 3.2 Mixtures

## **Hazardous ingredients**

No	Substance name		Additional information			
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Conce	ntration		%
	REACH no					
1	Quartz (SiO2)					
	14808-60-7	STOT RE 1; H372i	>=	5.00 - <	10.00	%-b.w.
	238-878-4					
	-					
	-					
2	cristobalite					
	14464-46-1	STOT RE 1; H372i	<	2.50		%-b.w.
	238-455-4					
	-					
	-					
3	MAGNESIUM OXID	E				
	1309-48-4	-	>=	10.00 - <	25.00	%-b.w.
	215-171-9					
	-					
	-					

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Route, target organ, concrete effect
1	H372i
	inhalational; -; -
2	H372i
	inhalational; -; -

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### **General information**

If the patient is likely to become unconscious, place and transport in stable sideways position. In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.



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#### After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. Call a doctor immediately.

#### After skin contact

In case of contact with skin wash off with water.

#### After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.

#### After ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a doctor immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

### Suitable extinguishing media

Carbon dioxide; Extinguishing powder; Water spray jet; Foam

#### Unsuitable extinguishing media

High power water jet

#### 5.2 Special hazards arising from the substance or mixture

No data available.

## 5.3 Advice for firefighters

Use self-contained breathing apparatus. Product itself does not burn. Adapt extinguisher and fire-fighting measures to fire in the environment. Wear protective clothing.

## SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

### For non-emergency personnel

Avoid dust formation. Refer to protective measures listed in sections 7 and 8.

## For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

## 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

#### 6.3 Methods and material for containment and cleaning up

Take up mechanically. Avoid raising dust. When picked up, treat material as prescribed under heading "Disposal considerations".

#### 6.4 Reference to other sections

No data available.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

#### Advice on safe handling

Keep container tightly closed. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.



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## General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Do not inhale dust. Keep away from foodstuffs and beverages.

#### Advice on protection against fire and explosion

No special measures necessary.

## 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

#### Requirements for storage rooms and vessels

Keep only in the original container.

#### Advice on storage assembly

Protect against humidity; Do not store together with: explosive substances

#### 7.3 Specific end use(s)

No data available.

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

## Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	Dust				
	List of approved workplace exposure limits (WELs) / EH40				
	Dust respirable				
	WEL long-term (8-hr TWA reference period)	10	mg/m³		
	Comments	see Definition	n 44 "Dust"		
	List of approved workplace exposure limits (WELs) / E	H40			
	Dust inhalable				
	WEL long-term (8-hr TWA reference period)	4	mg/m³		
	Comments see Definition 44 "Dust"				
2	MAGNESIUM OXIDE	1309-48-4		215-171-9	
	List of approved workplace exposure limits (WELs) / EH40				
	Magnesium oxide				
	inhalable dust				
	Mg				
	WEL long-term (8-hr TWA reference period)	10	mg/m³		
	List of approved workplace exposure limits (WELs) / EH40				
	Magnesium oxide				
	fume and respirable dust				
	Mg				
	WEL long-term (8-hr TWA reference period)	4	mg/m³		

## 8.2 Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

## Personal protective equipment

## Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

## Eye / face protection

Safety glasses with side protection shield (EN 166)



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## Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

#### Other

Normal chemical work clothing.

#### **Environmental exposure controls**

No data available.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Form/Colour				
Powder				
white				
Odour				
odourless				
Odour threshold				
No data available				
pH value				
Value	5	- 7		
Concentration		80	% (water)	



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**Boiling point / boiling range** 

No data available

Melting point / melting range

No data available

Decomposition point / decomposition range

No data available

Flash point

No data available

**Auto-ignition temperature** 

No data available

**Oxidising properties** 

No data available

**Explosive properties** 

No data available

Flammability (solid, gas)

No data available

Lower flammability or explosive limits

No data available

Upper flammability or explosive limits

No data available

Vapour pressure

No data available

Vapour density

No data available

**Evaporation rate** 

No data available

Relative density

No data available

**Density** 

No data available

**Bulk density** 

Value
Reference temperature

1.2 - 1.5 g/cm<sup>3</sup> 21 °C

Reference temperature 21

Solubility in water

No data available

Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

9.2 Other information

Other information

The product is hygroscopic.

Product hardens with the addition of water.



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## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

#### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

#### 10.3 Possibility of hazardous reactions

None, if handled according to order.

## 10.4 Conditions to avoid

Protect from humid air and water.

## 10.5 Incompatible materials

None known.

#### 10.6 Hazardous decomposition products

Under normal heating of the hardened ground-mass in the pre-heat furnace ammonia is released with a concentration of 1 percent by weight. Provide ventilation to exhaust vapours and conduct them directly to the outside.

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Acute oral toxicity	
No data available	

## Acute dermal toxicity

No data available

#### Acute inhalational toxicity

No data available

## Skin corrosion/irritation

No data available

## Serious eye damage/irritation

No data available

## Respiratory or skin sensitisation

No data available

## Germ cell mutagenicity

No data available

## Reproduction toxicity

No data available

#### Carcinogenicity

No data available

## STOT - single exposure

No data available

## STOT - repeated exposure

No data available

## Aspiration hazard

No data available

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Contact with the skin and eyes may cause mechanical irritation. Inhalation of dusts may irritate the respiratory tract. Can cause silicosis.



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## **SECTION 12: Ecological information**

## 12.1 Toxicity

Tovici	i+v, +a	fich /	(acute)
IUXIC	ity to	11211	acute

No data available

## Toxicity to fish (chronic)

No data available

## **Toxicity to Daphnia (acute)**

No data available

#### **Toxicity to Daphnia (chronic)**

No data available

## Toxicity to algae (acute)

No data available

## Toxicity to algae (chronic)

No data available

#### **Bacteria toxicity**

No data available

### 12.2 Persistence and degradability

No data available.

#### 12.3 Bioaccumulative potential

No data available.

## 12.4 Mobility in soil

No data available.

## 12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment				
PBT assessment	No data available.			
vPvB assessment	No data available.			

#### 12.6 Other adverse effects

No data available.

#### 12.7 Other information

	mation

Do not discharge product unmonitored into the environment.

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

## **Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.



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## **SECTION 14: Transport information**

#### 14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

#### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

## 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

#### 14.4 Other information

No data available.

#### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

#### 14.6 Special precautions for user

No data available.

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

## **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations

#### Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

#### REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

# Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XVII of the REACH regulation (EC) 1907/2006.

## Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

## Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

## 15.2 Chemical safety assessment

No data available.

## **SECTION 16: Other information**

## Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

#### Department issuing safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de



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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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