

**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**Mixing liquid without freeze protection (REF 51095)**

**Begosol HE (REF 51095 - 51096)**

**Begosol K (REF 51120 - 51121)**

**WiroOne Liquid (REF 54824)**

**BegoSol Select (REF 54867)**

### 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 information**

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

This product does not meet the classification and labelling criteria given in the Dangerous Preparations Directive (1999/45/EC; DPD)

### 2.2 Label elements

Not relevant

### 2.3 Other hazards

**PBT assessment**

The components of this product are not considered to be a PBT.

**vPvB assessment**

The components of this product are not considered to be a vPvB.

Trade name: Mixing liquid without freeze protection (REF 51095)

Current version : 2.0.5, issued: 19.10.2015

Replaced version: 2.0.4, issued: 11.02.2015

Region: GB

### 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 / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	
1	silicon dioxide, chemically prepared			
	7631-86-9 231-545-4 - 01-2119379499-16	-	> 50.00 - < 70.00	%-b.w.

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

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

##### After inhalation

Ensure supply of fresh air. Remove affected person from the immediate area.

##### After skin contact

Wash off immediately with soap and 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

Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Let plenty of water be drunk in small gulps. 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

Foam; Water spray jet; Carbon dioxide; Extinguishing powder

##### Unsuitable extinguishing media

High power water jet

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

No risks known.

#### 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.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

Ensure adequate ventilation. Refer to protective measures listed in sections 7 and 8.

**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

**For emergency responders**

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

**6.2 Environmental precautions**

Collect contaminated water / firefighting water separately. Do not discharge into the drains/surface waters/groundwater.

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

Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). 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**

No special measures necessary if stored and handled as prescribed.

**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. 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. Keep from freezing.

**Recommended storage temperature**

Value 20 - 30 °C

**Requirements for storage rooms and vessels**

Keep only in the original container. Containers which are opened must be carefully closed and kept upright to prevent leakage.

**Advice on storage assembly**

None known

**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	silicon dioxide, chemically prepared	7631-86-9	231-545-4
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Silica, amorphous			
inhalable dust			
	TWA	6	mg/m <sup>3</sup>
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Silica, amorphous			
respirable dust			
	TWA	2.4	mg/m <sup>3</sup>

Trade name: Mixing liquid without freeze protection (REF 51095)

Current version : 2.0.5, issued: 19.10.2015

Replaced version: 2.0.4, issued: 11.02.2015

Region: GB

**DNEL and PNEC values****DNEL values (worker)**

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	silicon dioxide, chemically prepared			7631-86-9 231-545-4
	inhalative	Long term (chronic)	systemic	4 mg/m <sup>3</sup>

**8.2 Exposure controls****Appropriate engineering controls**

No data available.

**Personal protective equipment****Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn.

**Eye / face protection**

Safety glasses (EN 166)

**Hand protection**

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station 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**

<b>Form/Colour</b>	
liquid	
opaline; milky; green; pink	
<b>Odour</b>	
odourless	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
Value	8.0 - 10.5
<b>Boiling point / boiling range</b>	
Value	100 °C
<b>Melting point / melting range</b>	
Value	0 °C
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
not determined	

**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
No data available			
<b>Upper flammability or explosive limits</b>			
No data available			
<b>Vapour pressure</b>			
Value	appr.	20	hPa
Reference temperature		20	°C
<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	1.05	-	1.45 g/cm <sup>3</sup>
Reference temperature			20 °C
<b>Solubility in water</b>			
No data available			
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
No data available			
<b>Viscosity</b>			
Value	2	-	50 mPa*s
Reference temperature			20 °C
Type	dynamic		

## 9.2 Other information

<b>Other information</b>
No data available.

## 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

None, if handled according to intended use.

Trade name: Mixing liquid without freeze protection (REF 51095)

Current version : 2.0.5, issued: 19.10.2015

Replaced version: 2.0.4, issued: 11.02.2015

Region: GB

**10.5 Incompatible materials**

cationic agents; Electrolytes

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
LD50	>	5000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Source	ECHA		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
LC50	>	0.14	mg/l
Duration of exposure		4	h
State of aggregation	Dust		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		

Respiratory or skin sensitisation			
No data available			

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

<b>Reproduction toxicity</b>			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
Species		rat	
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

<b>Carcinogenicity</b>			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
Species		rat	
Method		OECD 453	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

<b>STOT-single exposure</b>			
No data available			

<b>STOT-repeated exposure</b>			
No	Substance name	CAS no.	EC no.
1	silicon dioxide, chemically prepared	7631-86-9	231-545-4
Route of exposure		oral	
Species		rat	
Method		OECD 408	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		inhalational	
Species		rat	
Method		OECD 413	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

<b>Aspiration hazard</b>			
No data available			

**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
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

<b>Results of PBT and vPvB assessment</b>	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

### 12.6 Other adverse effects

No data available.

### 12.7 Other information

<b>Other information</b>
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.



**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

## 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 XIV 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 Umwelt Consult GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 183, Tel.: +49(40)79 02 36 300, Fax: +49(40)79 02 36 357, e-mail: umco@umco.de

---

**Trade name:** Mixing liquid without freeze protection (REF 51095)

**Current version :** 2.0.5, issued: 19.10.2015

**Replaced version:** 2.0.4, issued: 11.02.2015

**Region:** GB

---

This information is based on our present state of knowledge and experience.  
The security data sheet describes products with a view to the security requirements.  
However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO Umwelt Consult GmbH.