

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

Current version : 4.1.1, issued: 10.05.2022

Replaced version: 4.1.0, issued: 09.06.2021

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, 51099)

Begosol K (REF 51120, 51121, 51122)

Begosol CC (REF 54907 - 54908)

Form

Contains Nanoforms

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

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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).

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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

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3.2 Mixtures

Chemical characterization

Information regarding nanoparticle properties: see section 9

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	-	>= 25.00 - < 50.00	wt%

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 with soap and water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Do not induce vomiting. Rinse the 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

Extinguishing measures to suit surroundings.

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. Wear full protective suit.

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.

For emergency responders

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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 collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

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.

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.

Incompatible products

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
List of approved workplace exposure limits (WELs) / EH40			
	Silica, amorphous inhalable dust		
	WEL long-term (8-hr TWA reference period)	6	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
	Silica, amorphous respirable dust		
	WEL long-term (8-hr TWA reference period)	2.4	mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. This should be achieved by the use of local exhaust ventilation and good general extraction.

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

Tightly fitting safety glasses (EN 166).

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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.

Appropriate Material nitrile rubber

Inappropriate material Leather

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**

State of aggregation	
liquid	
Form/Colour	
liquid	
transparent; red	
Odour	
odourless	
pH value	
Value	9.5 - 10.4
Source	supplier
Boiling point / boiling range	
Value	100 °C
Source	supplier
Melting point/freezing point	
No data available	
Decomposition temperature	
No data available	
Flash point	
not determined	
Ignition temperature	
No data available	
Auto-ignition temperature	
Source	supplier
Comments	Product is not selfigniting.
Explosive properties	
Product does not present an explosion hazard.	
Flammability	
Not applicable	
Source	supplier
Lower explosion limit	
No data available	
Upper explosion limit	
No data available	
Vapour pressure	
Value	23 hPa

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Reference temperature	20	°C
Source	supplier	
Relative vapour density		
No data available		
Relative density		
No data available		
Density		
Value	1.28 - 1.30	g/cm ³
Reference temperature	20	°C
Source	supplier	
Solubility in water		
Source	supplier	
Comments	Completely miscible	
Solubility		
No data available		
Partition coefficient n-octanol/water (log value)		
No data available		
Kinematic viscosity		
Value	< 16	mPa*s
Reference temperature	20	°C
Type	dynamic	
Solvent content		
Value	55 - 65	%
Solids content		
Value	35 - 45	%
Particle characteristics		
Silicon dioxide nanoform: Spherical, amorphous, not surface-treated		

9.2 Other information

Other information
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, when used as directed.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

Electrolytes

10.6 Hazardous decomposition products

No hazardous decomposition products known. In case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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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

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (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

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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	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 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information

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.
dispose of in accordance with local regulation.

Packaging

Residues 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.

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 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

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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, MIXTURES AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances subject to restriction as listed in 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

A chemical safety assessment has not been carried out.

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.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

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 section.

Creation of the safety data sheet

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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.

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