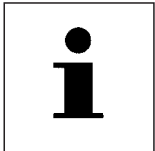


Safety instructions

Please read and follow the instructions in the insert "Safety instructions and general instructions for BEGO investment materials"!

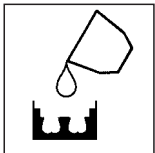
BEGO is an official co-partner of the German Olympic team for **Beijing in 2008**

General instructions



- Liquid: BegoSol® (storage and transport temperature: -10 °C to +35 °C / 14 °F to 95 °F)
- Before mixing, rinse out the clean mixing bowl with water and wipe off. Mixing bowls that are not clean or are dry withdraw moisture from the investment material!
- Processing width at 20 °C / 70 °F: approx. 2 minutes and 45 seconds. At higher room temperatures the working time will be reduced!
- First put in liquid and add powder, mix thoroughly with a spatula for approx. 10–15 seconds. After that mix for 60 seconds in a mixing unit, such as *Motova*, under a vacuum, as far as possible. (Processing without mixer: mix for **2 minutes** on the vibrator.)

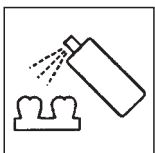
Duplication



- Duplication can be carried out in gel or in silicone moulds. When working with a pressure compaction unit, silicone moulds and the duplicate model must be made under the same conditions (2–4 bar). Duplicate in gel moulds only without pressure!
- Fill duplication mould on the vibrator and then remove it immediately from the vibrator.
- Removal: from gel moulds after 45 to 60 minutes, from silicone moulds after 30–60 minutes.

Mixing	Wirovest®	BegoSol®	Aqua dest.	Total liquid	Concentration of liquid
• for gel duplication (<i>Castogel</i>®, <i>Wirodouble</i>®, <i>WiroGel M</i>) – without pressure					
Ratio	100 g			13 ml	
for 2 duplicate models	1 x 400 g	0 ml 21 ml	52 ml 31 ml	52 ml	0 % – 40 %*
• for silicone duplication (<i>Wirosil</i>®) – without pressure					
Ratio	100 g			15 ml	
for 2 duplicate models	1 x 400 g	0 ml 24 ml	60 ml 36 ml	60 ml	0 % – 40 %*
• for silicone duplication (<i>Wirosil</i>®) – with pressure (2–4 bar)					
Ratio	100 g			15 ml	
for 2 duplicate models	1 x 400 g	27 ml	33 ml	60 ml	45 %

* Duplication without pressure: 0 % to 40 % BegoSol®

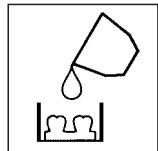


Surface treatment

• Duplicate models in gel moulds:					
	<i>Durol</i>	or	<i>Dipfix</i>	or	<i>Durol E</i>
Drying	30 minutes (250 °C / 500 °F)		45 minutes (150 °C / 300 °F)		45 minutes (150 °C / 300 °F)
Dipping	briefly 3 times (approx. 2 seconds)		briefly 3 times (approx. 2 seconds)		long 1 time (approx. 4 seconds)
Subsequent drying	5–10 minutes (250 °C / 500 °F)		10 minutes (150 °C / 300 °F)		1 minute (150 °C / 300 °F)
• Duplicate models in silicone moulds:					
	<i>Durofluid</i>				
Drying	10 minutes (80–100 °C / 180–210 °F)				
Spraying	spray weakly				
Subsequent drying	5–10 minutes (80–100 °C / 180–210 °F)				

Special investment material for partial dentures

Investment

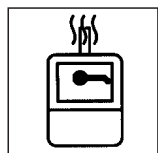


- Before investing, prepare the wax-up with *Wiropaint plus* fine investment material or *Aurofilm* wetting agent (please follow the processing instructions for the products).
- Fill mould ring on the vibrator. Then remove immediately from the vibrator.
- Setting time: at least 30 minutes.

Mixing	Wirovest®	BegoSol®	Aqua dest.	Total liquid	Concentration of liquid
Ratio	100 g			15 ml	
for 1 mould	1 x 400 g	0 ml 18 ml	60 ml 42 ml	60 ml	0 % 30 %*

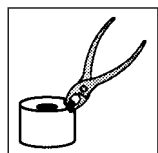
* 30 % BegoSol® prevents cracks in the mould, which may occur due to rapid heating.
As a rule, distilled water is used for mixing.

Preheating



Insertion temperature	Room temperature
Holding levels	250 °C/500 °F (5 °C/min/9 °F/min) } (Heating rates only applies to 570 °C/1060 °F (7 °C/min/12 °F/min) } furnaces with computer control)
Final temperature	950–1050 °C (1740–1920 °F)
Holding times	30–60 minutes (depending on the size and number of moulds)

After casting



After casting allow the moulds to cool down until warm to the touch, **do not quench in water!**
Investment materials contains quartz. Do not inhale dust! Danger of lung harms (silicosis, lung cancer).
To avoid dust during deflasking, place the moulds in water after they have cooled down completely after casting until they are thoroughly moistened.

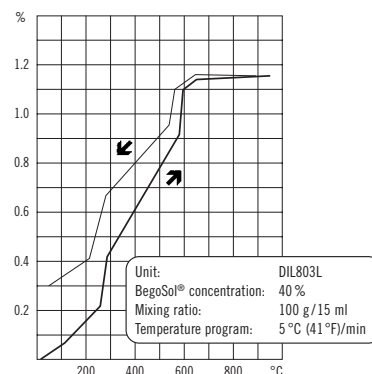
Processing time at 20 °C/70 °C approx. 2 min 45 s
Total expansion in the mould (40 % BegoSol®) approx. 2.3 %

Characteristic material values in accordance with DIN EN ISO 9694 (40 % BegoSol®)

Beginning of setting (Vicat time) approx. 5 min
Compressive strength (after 2 hours) approx. 15 MPa
Linear thermal expansion approx. 1.15 %

This product was made according to the specifications of DIN EN ISO 9694 and meets its requirements in all respects.

Thermal expansion curve Wirovest®

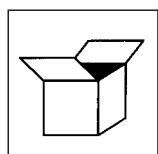


BEGO thermal analysis (dep. Development Material)

Data



Availability and recommendations



Wirovest	1 dispenser box	6 kg = 15 pieces 400 g bags	– Order No. 51057
	1 carton	18 kg = 45 pieces 400 g bags	– Order No. 51046
	1 carton	18 kg = 4 pieces 4.5 kg bags	– Order No. 51048
BegoSol®	1 bottle = 1000 ml		– Order No. 51090
	1 canister = 5000 ml		– Order No. 51091

<i>Motova 100</i>	26280 (230 V)	<i>Wirosil®</i>	52001 (2 kg)	<i>Durol E</i>	52148 (1000 ml)
<i>Motova 300</i>	26270 (230 V)	<i>Wirosil® duplicating flask system</i>	52072 (small)	<i>Durol</i>	52111 (1000 ml)
<i>Castogel®</i>	52052 (6 kg)		52083 (large)	<i>Dipfix</i>	52135 (1000 ml)
<i>Wirodouble®</i>	52050 (6 kg)			<i>Durofluid</i>	52008 (100 ml)
<i>WiroGel M</i>	54351 (6 kg)			<i>Wiropaint plus</i>	51100 (200 ml)
				<i>Aurofilm</i>	52019 (100 ml)

Whether given verbally, in writing or by practical instructions, our recommendations for use are based upon our own experience and trials and can only be considered as standard values.

Our products are subject to a constant further development. Therefore alterations in construction and composition are reserved.

For particularly good results we recommend an alloy from the following groups, depending on the indication:

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WIRONIUM®
(only given to authorized laboratories)

Wironit®

PlatinLloyd®



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