**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!

Firstly, put in liquid and add powder, mix thoroughly with a spatula by hand for 10 – 15 seconds (or by machine using the Motova 300).

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.)

**General instructions**

- 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**

<table>
<thead>
<tr>
<th></th>
<th>Wirovest®</th>
<th>BegoSol®</th>
<th>Aqua dest.</th>
<th>Total liquid</th>
<th>Concentration of liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>for gel duplication (Castogel®, Wiroadouble®, WiroGel M) – without pressure</strong></td>
<td></td>
<td></td>
<td></td>
<td>13 ml</td>
<td></td>
</tr>
<tr>
<td>Ratio</td>
<td>100 g</td>
<td>0 ml</td>
<td>52 ml</td>
<td>52 ml</td>
<td>0 % – 40 % *</td>
</tr>
<tr>
<td>for 2 duplicate models</td>
<td>1 x 400 g</td>
<td>21 ml</td>
<td>31 ml</td>
<td>31 ml</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Aqua dest.</th>
<th>Total liquid</th>
<th>Concentration of liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>for silicone duplication (Wirosil®) – without pressure</strong></td>
<td></td>
<td></td>
<td></td>
<td>15 ml</td>
<td></td>
</tr>
<tr>
<td>Ratio</td>
<td>100 g</td>
<td>0 ml</td>
<td>60 ml</td>
<td>60 ml</td>
<td>0 % – 40 % *</td>
</tr>
<tr>
<td>for 2 duplicate models</td>
<td>1 x 400 g</td>
<td>24 ml</td>
<td>36 ml</td>
<td>36 ml</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>BegoSol®</th>
<th>Aqua dest.</th>
<th>Total liquid</th>
<th>Concentration of liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>for silicone duplication (Wirosil®) – with pressure (2–4 bar)</strong></td>
<td></td>
<td></td>
<td></td>
<td>15 ml</td>
<td>45 %</td>
</tr>
<tr>
<td>Ratio</td>
<td>100 g</td>
<td>0 ml</td>
<td>60 ml</td>
<td>60 ml</td>
<td>0 % – 40 % *</td>
</tr>
<tr>
<td>for 2 duplicate models</td>
<td>1 x 400 g</td>
<td>27 ml</td>
<td>33 ml</td>
<td>33 ml</td>
<td></td>
</tr>
</tbody>
</table>

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

**Surface treatment**

**Dual models in gel moulds:**

- **Duro**
  - Drying: 30 minutes (250 °C / 500 °F)
  - Dipping:
    - Briefly 3 times (approx. 2 seconds)
  - Subsequent drying:
    - 5 – 10 minutes (250 °C / 500 °F)
- **Dipfix**
  - Drying: 45 minutes (150 °C / 300 °F)
  - Dipping:
    - Briefly 3 times (approx. 2 seconds)
  - Subsequent drying:
    - 10 minutes (150 °C / 300 °F)
- **Dural E**
  - Drying: 45 minutes (150 °C / 300 °F)
  - Dipping:
    - Long 1 time (approx. 4 seconds)
  - Subsequent drying:
    - 1 minute (150 °C / 300 °F)

**Dual models in silicone moulds:**

- **Durofluid**
  - Drying: 10 minutes (80 – 100 °C / 180 – 210 °F)
  - Spraying: spray weakly
  - Subsequent drying:
    - 5 – 10 minutes (80 – 100 °C / 180 – 210 °F)

**Official care provider**

- to the German Olympic teams since 2002
Wirovest®
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

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Wirovest®</th>
<th>BegoSol®</th>
<th>Aqua dest.</th>
<th>Total liquid</th>
<th>Concentration of liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>for 1 mould</td>
<td>100 g</td>
<td>0 ml</td>
<td>60 ml</td>
<td>60 ml</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>1 x 400 g</td>
<td>18 ml</td>
<td>42 ml</td>
<td>40 %</td>
<td>30 %</td>
</tr>
</tbody>
</table>

*30 % BegoSol® prevents cracks in the mould, which may occur due to rapid heating.

As a rule, distilled water is used for mixing.

Preheating

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.

After casting

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

Data

- Characteristic material values in accordance with DIN EN ISO 15912 (40 % BegoSol®)
  - Beginning of setting (Vicat time): approx. 5 min
  - Compressive strength (after 2 hours): approx. 15 MPa
  - Linear thermal expansion: approx. 1.15 %

Availability and recommendations

- This product was made according to the specifications of DIN EN ISO 15912 and meets its requirements in all respects.
- Motor: 100 (230 V)
  - 26280 (230 V)
  - 26270 (230 V)
  - 52052 (6 kg)
  - 52050 (6 kg)
  - 54351 (6 kg)

Wirovest®
- 1 carton = 6 kg = 15 pieces 400 g bags
- 1 carton = 18 kg = 45 pieces 400 g bags
- 1 carton = 18 kg = 4 pieces 4.5 kg bags

BegoSol®
- 1 bottle = 1000 ml
- 1 canister = 5000 ml

Motova 100
- 26280 (230 V)
- 26270 (230 V)
- 52052 (6 kg)
- 52050 (6 kg)
- 54351 (6 kg)

Motova 300
- 26280 (230 V)
- 26270 (230 V)
- 52052 (6 kg)
- 52050 (6 kg)
- 54351 (6 kg)

Wirodouble®
- 52001 (2 kg)
- 52027 (small)
- 52083 (large)

WiroGel M
- 52148 (1000 ml)
- 52111 (1000 ml)
- 52135 (1000 ml)
- 52008 (100 ml)
- 51100 (200 ml)
- 52019 (100 ml)

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

PlatinLloyd®
- (only given to authorized laboratories)

Wironit®
- since 1890

Motova
- Since 1890

PlatinLloyd®
- Since 1890

Wironit®
- Since 1890

Wiropaint®