MO SPEED 20
850 - 900 °C

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Phosphate-bonded fine-grain precision investment material for the sophisticated model casting technique. Suitable for the Speed technique!

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ONLY FOR DENTAL USE BY QUALIFIED PERSONNEL

MADE IN GERMANY

Instructions for use

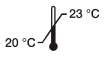
1. Indication

- **MO SPEED 20** is a phosphate-bonded, thermally stabilised precision investment material for the model casting technique**.** A silky smooth casting surface results from the particularly fine-grain composition.
- **MO SPEED 20** is suitable for the Speed technique directly at 850 – 900 ℃ as well as preheating, taking holding times and end temperature into consideration.
- Suitable for both silicone and gel duplication

2. Technical data

Processing parameters	**Recommended value**
Temperature powder and liquid	**21 - 23℃**
Mixing ratio	**Models: 200 g powder : 40 ml liquid** *Liquid concentration approx. 60% to 70%* **Over-bedding: 2 x 200 g powder : 80 ml liquid** *Liquid concentration approx. 60% to 70%*
Stirring time under vacuum	**2 min. under vacuum**
Processing time	**5 - 6 min.**

3. Important information



- Before use, always follow the safety instructions specified below.
- Use the special mixing beaker and spatula to mix **MO SPEED 20**. Do not bring into contact with plasters.
- Protect **MO SPEED 20 Liquid** against frost!
- The best and most consistent results are achieved with a stable storage temperature for the powder and liquid of 20 – 23 ℃. We recommend storage with air-conditioned cabinets from Feguramed.

4. Duplicating the master model with silicone or gel

Prepare the master model in the usual way, then duplicated with **Fegura® Sil hydro special II** (REF 2115), **Fegura® Sil AD special** (REF 2022) , **Fegura® Sil quick** (REF 1080) or **Fegura® Sil extra hard** or gel **Fegura® Gel SF** (REF 2220).

5. Production of the duplicate model

200 g powder : 40 ml liquid	**60%**	**70%**
Liquid concentration 60 - 70%	**24 ml Liquid + 16 ml demin. water**	**28 ml Liquid + 12 ml demin. water**

MO SPEED 20 Liquid is supplied as a 100% concentrate and has to be diluted with demineralized water to the recommended concentration of approx. 60% - 70%. The model and over-bedding should be mixed with the same concentration.

Expansion control approx. **60 – 70 %** concentrate **for silicone duplication**
approx. **60 %** concentrate **for gel duplication**

- Present Liquid, add powder and stir by hand with the spatula for approx. 30 sec. until the investment

material is fully wettened, then mix for **2 min. under vacuum**.

- The processing time is 5 - 6 min. at 22℃. **Heat reduces the processing time and cold increases it!**
- Allow models to harden in the silicone mould or gel mould for **30 min.** without shock.

Model pretreatment

duplicated with silicone	duplicated with gel
After MO SPEED 20 hardens, dry for approx. 30 min. for example on the heater plate (REF 2290) at 120 ℃ and allow to cool down to hand warmth. Modelling can then take place immediately.	Once MO SPEED 20 is hardened, dry the model in an air-conditioned cabinet preheated to 170 ℃ – 200 ℃ fo r approx. 45 min. and then immerse in Feguradur (cold immersion hardener) (art. no.: 2230) for 10-15 sec. and harden again for 10 min. at the same furnace temperature.

For improved adhesion of the wax and plastic profile to the model, the use of an adhesive is recommended, e.g. **BIO-PRÄP spray** (REF 2130) or **BIO-PRÄP liquid** (REF 2135).

6. Investing - over-bedding

400 g powder : 80 ml liquid	60%	70%
Liquid concentration 60 - 70%	48 ml Liquid + 32 ml demin. water	56 ml Liquid + 24 ml demin. water

The model and over-bedding should be mixed with the same concentration.

Pour out the casting mould at a mid-range vibrational frequency and immediately leave it to harden without shock for 25 min. at a pressure of approx. 2 bar. For over-bedding the investment material model we recommend the self-adhesive crepe cuff **Feguravest® Krepp-Liner** (REF 2270).
Then place the muffle with the casting funnel downwards on the fluted base plate of the preheated furnace.

7. The preheating process

Speed technique:
Place the muffle in the furnace preheated to the end temperature.

End temperature: 850 - 900℃	Holding times: 60 - 70 min.

Preheating with holding times:

	Climb rate in ℃/min.	Temperature in ℃	Holding time in min.
1st stage	5℃/min.	280℃	40 min.
2nd stage	7℃/min.	580℃	30 min.
3rd stage*	9℃/min.	850 - 900℃	60 min.**

8. Casting

Please observe the manufacturer's specifications for casting the alloys.
We recommend model casting alloys from Feguramed.

- **Combilium BSM 3** (REF 2191) for combined dentures
- **Combilium BSM 4** and **BSM 5** (REF 2190 – 2192) for clasp prostheses
- **BSM 4** and **BSM 5** are also suitable for laser welding

9. Devesting

After casting, leave the casting cuvette to cool down to room temperature and carefully devest it.
We recommend blasting abrasive from Feguramed.

- **Alumix** (3 - 4 bar) consisting of high-quality corundum (30 µm, 50 µm, 120 µm, 150 µm, 250 µm – REF 7040-7049)
- **Perla-Glas** (2 - 4 bar) glass beads (1-50 µm, 40-70 µm, 70-110 µm, REF 7010-7015).

Safety information:

- Investment materials contain quartz. Do not inhale dust! Risk of lung damage (silicosis, lung cancer). Recommendation: use a FFP 2 type respirator.
- Ammonia is produced if the investment material is heated over 200 ℃. Ammonia irritates the respirato ry organs.
- Risk of injury by speed preheating technique: Place all moulds quickly in the furnace (10 sec). Do not open the furnace door during the next 15 min!

Guarantee
As a result of a certified quality management system, Feguramed guarantees perfect quality for its products. The processing recommendations are based on reference values determined in our test laboratory. These reference values can only be assured if the processing recommendations are precisely followed. The user assumes responsibility for processing the products. Feguramed is not liable for poor results, as Feguramed has no influence on processing. Should claims for damages still arise, these are exclusively related to the value of the products.