

One-micro-Plus®



Phosphate-bonded investment material for precision casting of non-precious metals and precious metal alloys. Can be heated both stepwise and also in the Speed technique.



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ONLY FOR DENTAL USE BY QUALIFIED PERSONNEL

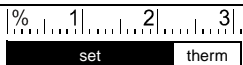
MADE IN GERMANY

Instructions for use

1. Indication

One-micro-Plus® is a phosphate-bonded, thermally stabilised precision investment material for the entire crown and bridge technique. A silky smooth casting surface results from the particularly fine-grain composition. **One-micro-Plus®** is suitable for the Speed technique directly at 850 – 900 °C as well as preheating, taking holding times and end temperature into consideration.

2. Technical data

Processing parameters	Recommended value
Temperature powder and liquid	21 - 23°C
Mixing ratio	100 g : 28 ml
Stirring time under vacuum	2 min under vacuum
Stirring speed *)	320 - 450 rpm
Processing time	9 - 10 min.
Expansion (100 %)	

*) We recommend mixers that can fulfil this parameter

3. Important information



- Before use, always follow the safety instructions specified below.
- Use the special mixing beaker and spatula to mix **One-micro-Plus®**. Do not bring into contact with plasters.
- Protect **One-micro-Plus® Liquid** against frost!
- The best and most consistent results are achieved with a stable storage temperature for the powder and liquid of 21 – 23 °C.

4. Expansion control

One-micro-Plus® is mixed with **One-micro-Plus® Liquid**. By diluting these liquids with demineralized water the expansion can be controlled such that contraction of the casting alloy is compensated.

Rule of thumb: The higher the concentration of the mixing liquid, the higher the overall expansion of the investment material.

The following dilutions of **One-micro-Plus® Liquid** are recommended.

	One-micro-Plus® Liquid
Inlays, onlays	45 – 60 %
Tapered crowns, telescope crowns	50 – 60 %
Crowns and bridges made of cast gold alloys	50 – 55 %
Metal-to-ceramic-alloys	50 – 60 %
NP alloys	90 – 100 %

5. Production of the casting mould



- Line the casting cuvettes with moistened FEGURAMED FLASK LINER (REF 3185) such that the ends overlap approx. 5 - 10 mm. Up to cuvette size 3 use one layer, above size 6 two layers.
- 100 g of **One-micro-Plus®** powder is stirred with 28 ml of diluted or undiluted **One-micro-Plus® Liquid**.
- If necessary, dilute **One-micro-Plus® Liquid** to the required concentration by adding demineralized water.

Glass cuvette	Powder	Mixing liquid
3 X	150 g	42 ml
6 X	2 x 150 g = 300 g	84 ml
9 X	3 x 150 g = 450 g	126 ml

5.1 Mixing the investment material



Place the liquid in a clean mixing beaker, add powder, pre-mix with a spatula and stir for around 2 min. under vacuum.

IMPORTANT: Please observe the mixing ratio and mixing time

5.2 Investing

Carefully pour out the casting cuvettes on a shaker and then leave to harden without shock. The processing time is approx. 9 - 10 min.

5.3 Hardening

The hardening time is 30 min.

6.1 Preheating – fast heating technique

Remove the base and immediately place in the furnace heated to the end temperature (see 7. End temperatures).

6 Preheating – Stepwise heating (standard)

	Climb rate in °C/min.	Temperature in °C	Holding time in min.
1st stage	3°C/min.	280°C	40 min.
2nd stage	3°C/min.	580°C	30 min.
3rd stage*	3°C/min.	650 - 900°C	60 min

*The end temperature depends on the alloy (see 7. End temperatures).

7. End temperatures



The following end temperatures are recommended:

Gold casting alloys	650 - 700 °C
Burn-on alloys	750 - 800 °C
NPM alloys	850 - 900 °C

8. Devesting

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

- **Alumix** consisting of high-quality corundum (30 µm, 50 µm, 120 µm, 150 µm, 250 µm – REF 7040-7049)
- **Perla-Glas** 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 °C. Ammonia irritates the respiratory 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.