



zubler

144™

1 Powder for 4 Applications

Made in Germany

Speed Investment for pressable ceramics, lithium disilicate, press-to, casting alloys (excluding titanium)

Mixing ratio for crowns, veneers, bridges, press-to:

| Ring size | Liquid ratio 60% | | | Bench set time | | Total time |
|-----------|------------------|-----------------|----------------|----------------|---|------------|
| | Zubler liquid | Distilled Water | Process+Former | Outside | | |
| 100g | 15 ml | 10 ml | 20 minutes | + 5 minutes | = | 25 minutes |
| 200g | 30 ml | 20 ml | 20 minutes | + 5 minutes | = | 25 minutes |

Inlays:

| Ring size | Liquid ratio 40% | | | Bench set time | | Total time |
|-----------|------------------|-----------------|----------------|----------------|---|------------|
| | Zubler liquid | Distilled Water | Process+Former | Outside | | |
| 100g | 10 ml | 15 ml | 20 minutes | + 5 minutes | = | 25 minutes |
| 200g | 20 ml | 30 ml | 20 minutes | + 5 minutes | = | 25 minutes |

Abutments on titanium bases:

| Ring size | Liquid ratio 70% | | | Bench set time | | Total time |
|-----------|------------------|-----------------|----------------|----------------|---|------------|
| | Zubler liquid | Distilled Water | Process+Former | Outside | | |
| 100g | 17.5 ml | 7.5 ml | 20 minutes | + 5 minutes | = | 25 minutes |
| 200g | 35 ml | 15 ml | 20 minutes | + 5 minutes | = | 25 minutes |

Pressing:

Casting:

| Alloy type | Powder Qty | Mixing ratio | Expansion liquid | Distilled water |
|-----------------------|------------|--------------|------------------|-----------------|
| High noble | 100g | 60% | 15 ml | 10 ml |
| Porcelain alloy | 100g | 70% | 17.5 ml | 7.5 ml |
| Non-precious | 100g | 85% | 21 ml | 4 ml |
| Palladium based alloy | 100g | 75% | 19 ml | 6 ml |

All data are recommendations. Different mixing devices, working procedures, materials, temperature influences during storing and processing can yield different results. Please calculate other not mentioned ring sizes in equivalent ratio.

Liquid density: 1,2gr/qcm ■ bench set time: 25 minutes ■ mixing time: 60 seconds ■ mixing speed: 420 rpm ■ working time: 5 minutes ■ storing temp: 20°C (68°F) ■ powder/liquid ratio: 100g = 25 ml

1. Fill mixture of liquid/dist. water in mixing bowl and add investment powder.
2. Make sure that all of the investment powder is moistened with liquid
3. Add vacuum to the bowl for 15 sec.
4. Mix for 60 sec. under vacuum at 420 r.p.m. if your mixing device can't reach the requested rpm please increase the mixing time to 90 seconds (instead of 60 sec)
5. Fill ring carefully, adapting investment to patterns under vibration.
6. If you use the investment for pressing do not put the rings in a pressure pot! If you use it for casting it is possible but it has a certain influence on the expansion. Objects are slightly smaller
7. Bench set investment rings outside of the ring former (sprue hole down) the last five minutes of the total bench set time when using a ringless system or for press rings.
8. Dry scrape the top of the ring to break the surface tension.
9. For the speed technique, place the rings in a pre-heated oven at 850°C (1562°F) when using the investment for pressing ceramic. When using the investment for casting please check the IFU of your alloy for the proper burnout temperature. The minimum burnout temperature is 650°C (1202°F). Rings must be placed with the sprue hole down. The ideal position is located in the rear part of the furnace with a minimum distance of about 1 inch to the walls. Make sure the wax can flow out unhindered after the ring is placed in the furnace.
10. If you have more than one ring, wait 10 minutes before the next ring is placed in the oven or place them into the furnace at the same time.
11. The burnout time must be at least 45 minutes for a 100g ring and 60 minutes for a 200g ring. Add an additional 10 minutes per ring. Shorter preheating causes incomplete casting/pressings.
12. For the over night technique, use a heat rate of 5°C (41°F) up to 290°C (554°F) and hold for 45min. Then 5°C (41°F) per minute, up to 580°C (1076°F) and hold 30min. Finally continue with 5°C (41°F) up to the final temp. and hold it for 60 minutes. To achieve the same results as the rush technique, decrease the liquid ratio 10%.
13. For use with Pattern Resin, place the ring into the furnace at 400°C (750°F) and heat up to the final temperature.
14. For non-precious and palladium based alloys, please use two layers of ring liner to ensure sufficient expansion when using metal rings.
15. The investment is also suitable for the ringless technique.
16. After the casting procedure, slow cooling to room temperature is required.

WARNING: Investments contain free silica
DO NOT BREATHE DUST. May cause delayed lung injury (silicosis/lung cancer).

Processing investment should take place in a 20°C (68°F) room. When storing the investment, please be sure the temperatures are between 7°-27°C (45°-80°F). Please allow investment powder and liquid to reach room temperature before processing.



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