SHERATITAN-EASY

INSTRUCTIONS FOR USE



1. Indication

Investment material for chrome casting (silicone duplication), crowns, bridges or implants made of titanium in the conventional heating process or speed casting process.

2. General information

Even tiny residues on the tools - even from cleaning agents - can have a negative effect on the casting result. Please use the respective spatula and mixing cup exclusively for processing phosphate-bonded investment material and always leave the mixing cup filled with water after use and cleaning.

SHERAMUFFELFORMER

You need SHERAMUFFELFORMERS with a mould ring insert to ensure that the investment material is open-pored.

SHERAMUFFELFORMERs are made of a thermoelastic and heat-insulating material. This supports the chemical reaction of the investment, as the "thermos flask effect" results in a better temperature curve with uniform and undisturbed expansion. Metal rings or other moulds are not suitable for SHERATITAN-EASY and lead to faulty castings. For an even better gas outlet, we recommend roughening the surface opposite the casting cone. Never treat casting muffles with Vaseline.

3. Safety instructions

Attention! Investment materials contain quartz! Do not inhale dust. Risk of lung diseases (silicosis or cancer). Wear a dust mask!

Please use a fine dust mask when weighing and mixing the powder and devesting the mould.

4. Technical data

Processing temperature: 20 - 23°C Powder and liquid (ideally 21°C in the temperature cabinet)

SHERALIQUID is an expansion liquid for all SHERA investment materials. SHERALIQUID is mixed with distilled water according to the mixing ratios below.

Mixing tables are available at www.shera.de for each product.

Recommendations and tips for expansion

The expansion can be changed by adjusting the ratio / proportion of liquids:

more SHERALIQUID EXTRA = more expansion less SHERALIQUID EXTRA = less expansion.

Our recommendations are based on test results from our laboratory and are approximate values. Various factors on site, such as room temperature, humidity or the settings of the mixer, can influence the results.

5. Processing

- Processing time: 6 7 minutes
- It is best to shake the can of investment powder vigorously before each use.
- Pour the powder into a mixing bowl and weigh out.
- Add the mixed liquid. (Start timing from 20 minutes!)
- Mix well by hand for 15 seconds.
- Stir for 45 seconds under vacuum; stirring speed 250 rpm.
- Fill the investment evenly into the mould from one side at a low vibration level: no further vibration is permitted.
- The curing time is 60 minutes from the start of the mixing process.

6. Crown, bridge or implant technology

Muffle sizePowder quantity:SHERALIQUID EXTRA
+ SHERALIQUIDMuffle 3x300 g:36 ml + 9 mlMuffle 6x600 g:72 ml + 18 ml

7. Chrome casting

SHERATITAN-EASY is only suitable for silicone duplication!

Duplicate

Make the silicone mould from a soft silicone. We recommend DUOSIL H (Shore hardness A 17) for this purpose. Please use a duplicating flask <u>without</u> a stabilising frame for duplication. To produce the investment model, place the silicone mould without the flask on the flask base and pour it in.

 Do not treat silicone moulds and wax modelling with any type of relaxant.

Expansion control: (SHERALIQUID EXTRA: SHERALIQUID)

- Model:
- 200g powder: 30 ml liquid
 - (24 ml Sheraliquid Extra : 6 ml Sheraliquid)
- The thinnest part of the model should be at least 1 cm.
- After 30 minutes, place the silicone mould (filled with investment) in a furnace heated to 80°C for 30 minutes (the silicone mould is heatresistant at 80°C
- Then remove the investment model from the silicone mould and place it in a furnace at 140°C for 20 minutes to dry. The model can then be modelled on once it has cooled down to room temperature.
- Attach casting channels and cones.

Muffle filling

- Quantity: 800g powder: 120 ml liquid
- 60 ml SHERALIQUID EXTRA: 60 ml SHERALIQUID
- Place the model on the open hole of the muffle base of the SHERAMUFFELFORMER MG. (figure 1)
- Fix the model edge to the base of the mould without gaps using adhesive wax (higher melting point). (figure 2)
- Place the thin side of the muffle ring of the SHERAMUFFELFORMER MG in the base of the muffle. (figure 3)
- Mix the investment material for filling up the muffle. (Start timing from 60 minutes!)
- Allow the investment to flow in without vibrating.
- Put the muffle into the furnace after 60 minutes.







Figure 1

Figure 2

Figure 3



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8. Heating up / preheating

General information

- Break the edges of the investment ring with a clean knife before placing it, making sure that nothing falls into the casting cone.
 Moulds should not be trimmed (plaster residue / water absorption of the mould)
- Place the muffle in the furnace with the cast iron cone to one side on a perforated or ribbed ceramic base plate.

Conventional heating

- After 60 minutes at the earliest counting from the start of the mixing process - place the muffle in a cold furnace.
- Heating rate: at up to 20°C/min., (holding levels are not required)
- Hold the final temperature for at least 75 minutes.
- Then allow the furnace to cool down to 600°C or remove the muffle from the furnace and allow it to cool down to 600°C at room temperature. As a guide: The 3-cavity muffle needs about 5 minutes at room temperature, the 6-cavity muffle needs about 6 minutes at room temperature and the chroma casting muffle needs about 10 minutes at room temperature.
- The mould can be cast at a temperature of approx. 600°C (casting temperature)

Speed casting

- You can place several muffles in the preheated furnace at the same time after 60 minutes. Then maintain the final temperatures for at least 10 minutes longer per additional muffle.
- Heat the furnace to a temperature of 850°C.
- After curing, place the mould in the 850°C furnace for 60 minutes.
- Then remove the muffle from the furnace and allow it to cool down to 600°C at room temperature. As a guide: the 3-cavity muffle needs about 5 minutes at room temperature, the 6-cavity muffle needs about 6 minutes at room temperature and the chrome casting muffle needs about 10 minutes at room temperature.
- The mould can be cast at a temperature of approx. 600°C (casting temperature)

9. Cooling down

Cool the muffle to room temperature. Do not quench with water.

10. Divestment

Remove the investment as usual. Vacuum off dust and do not hit the object or casting cone.

11. Storage

Store powder and liquid in a dry place, the processing temperature is between 20 - 23°C (ideally 21°C in a temperature cabinet)

SHERALIQUID / SHERALIQUID EXTRA are sensitive to cold. If stored or transported below +5°C, the liquid will be damaged and should no longer be used. It is therefore often not possible to ship the liquid during the winter months. Please make a winter stock in good time.

Store the investment material and its tools separately from the tools for plaster processing, as they have a negative effect on each other.

12. Information / Feedback:

Further information, mixing tables and safety data sheets are available at www.shera.de under each product.

If you have any questions, please contact our service team on +49 (a) 5443 9933 a.

When giving feedback on the product, please always state the batch number.

13. Guarantee

SHERA Werkstoff-Technologie GmbH is certified in accordance with EN ISO 13485 and guarantees flawless quality for its products thanks to an elaborate quality assurance system. Our user recommendations are based on so-called guide values determined in our test laboratory. These values can only be guaranteed if the specified process steps are adhered to. The user is responsible for the processing of the products. SHERA is not liable for faulty results, as SHERA has no influence on further processing. Any claims for damages that may nevertheless arise relate exclusively to the value of our products