



Investment for crown and bridgework for all alloys and pressable ceramic, for use in speed and overnight technique

Mixing ratio

Powder : Liquid 100 g : 25 (24 – 26) ml

Processing

- Provide requisite amount of Liquid
- Pour in the powder
- Mix thoroughly for 30 seconds.
- Agitate for 1 minute under vacuum at approx. 300rpm.

Adjust the mould to the lowest agitation setting while filling it. Once the casting muffle has been filled, no further agitation is performed.

Processing time approx. 5 minutes
Processing temperature 21°C

Different processing temperatures may cause a change of the product properties.

If metal rings are being used, line them with nonwoven as follows:

Muffel sizes 1 and 3: 1 nonwoven insert
Muffel size 6: 2 nonwoven inserts

If you are casting without rings, you must use a packing which is smooth on the inside. Overlapping edges, e. g. in the case of magnetic packings, must be greased with Vaseline.

1) Speed casting alloys

Preheating

25-30 minutes after filled up, the mould can be placed inside the oven, which is already preheated a temperature of 850°C.

Notice

When using models from 3D printing or milling systems in large investment rings (e.g. 500 to 600 g), remove the ring after 25 minutes and place the investment ring on a grid. After a further 10 minutes, place in the furnace preheated to 850°C to 900°C.

Important

In the case of ovens with floor heating, make sure there is sufficient clearance (approx. 1 cm) between the mould and the floor plate

Preheating times

Muffel size 1	min. 35 min
3	min. 45 min
6	min. 60 min

in each case at final temperature. For each additional ring increase the preheating time for another 10 minutes.

Concentrate admixtures for metal rings and ringless casting:

- 50 % Onlays, inlays, conicals crowns
- 65 % Gold castings, crowns and bridges
- 75 % Secondary parts and baked ceramics
- 100 % Non-ferrous metal alloys



The concentrate admixture figures are for guidance only - they depend on the type of alloy involved.

2) Over night heating alloys

During the heating over night the liquid concentration should be reduced by 5% to 10%, according to alloy and application, as the full setting expansion is reached.

Burnout

After hardening place the mould into the cold oven. At 290 °C and 580 °C the temperature should be maintained for 30 - 45 minutes,

depending on the size and the number of the moulds. Hold the final temperature, recommended for the alloys, 30 - 45 minutes.

Notice

When using models from 3D pressure or milling systems, no changes need to be made for overnight preheating.

Heating rate app. 3 - 5 °C/min

Maximum temperature 1200 °C
Cast without delay.

3) Pressable Ceramic

Wax-mount the wax object on the base of the pressing cylinder in the usual manner.

Lightly coat the pressing cylinder with Vaseline to ensure the pressing cylinder can be removed easily and reliably after the embedding compound has hardened.

Extreme accuracy must be observed when preparing the embedding compound to ensure the required degree of expansion and therefore maximum fit accuracy.

Mixing Ratio

40 - 60 % for inlays, onlays
60 - 70 % for individual crowns

A higher concentration of Gilvest Liquid increases the total expansion. While using low concentrations as used for pressable ceramics use app. 24,5ml Liquid to 100g powder.

Mixing the Embedding Compound

Pour the embedding liquid in corresponding concentration and quantity into the mixing vessel, add a corresponding quantity of embedding compound and blend briefly on the vibrator. Then mix by machine for 1 minute under vacuum.

Muffle set:

100 g max. 3 equivalent wax parts
200 g max. 5 equivalent wax parts

Embedding the Pressing Cylinder

Embedding is conducted in the usual manner. Allow the cylinder to harden in atmosphere for at least 15 to 17 minutes for 100 g muffles and 17 to 19 minutes for 200 g muffles and after removing the plastic base of the cylinder, place it in the preheating furnace set to a temperature of 850 ° C.

Preheating time

100 g cylinder	45 minutes
200 g cylinder	60 minutes



The required press ceramic material is then added to the cylinder in the ceramic press furnace in the usual manner.

Cooling and Removing the Cylinder

After the cylinder has cooled it is removed and cleaned abrasively according to usual techniques for the pressable ceramic.

Packaging units

Portable cartons with foil liner	20 kg
Pouches	160 g and 4 kg

General information for using Gilvest HS for 3D printed or milled denture parts

C&B denture parts manufactured by 3D printing or milling can be made of different materials depending on manufacturer and technology. Tests with different materials have not shown any negative results.

Nevertheless, we recommend testing any new material before use.

Warning

This embedding compound contains quartz and cristobalite. So avoid inhaling the dust!

Do not open the oven during the heating-phase as the arisen wax-steams might catch fire in the air.

The recommendations are given to the best of our knowledge after careful control. We guarantee the quality of our products. Any further liability cannot be accepted since the proper application of our products is outside of our control.