



## Special investment for Lithium-Disilicate and all other pressable ceramics – for use in speed- and conventional heating (overnight) technique

**Gilvest HS PK** is a special investment for pressing of Lithium-Disilicate-Ceramics. It can also be used with all other pressable ceramics. The investment powder **Gilvest HS PK** is suitable for using speed technique as well as traditional overnight technique

### Mixing ratio

Powder: Gilvest Liquid                      100 g : 25 ml

### Mixing of investment powder

- Provide required amount of liquid
- Add the investment powder
- Soak for 10 sec.
- Mix thoroughly for 20 sec.
- Agitate for 1 min. under vacuum at 300 - 350 rpm
- Maintain vacuum for another 15 sec.

Fill the ring at lowest vibration speed. Once the ring is filled, no further vibration and agitation is performed

### Processing

Processing time:                                      > 5 min.  
Processing temperature                              21°C (70°F)

Different processing temperature can have a negative impact on the product properties.

Wax-up the wax patterns / objects on the base of the pressing cylinder in the usual manner.

Lightly coat base of pressing cylinder with Vaseline to ensure pressing cylinder can be removed easily and reliably after investment has hardened.

### Liquid concentrate

40 – 60 %    for Inlays and Onlays, depending on preparation, size and volume  
60 – 70 %    for single / individual crowns  
70 – 85 %    for anterior / posterior bridges

The concentrate figures are for guidance only and can be individually adjusted; higher liquid concentration increase total expansion.

### Ring / Muffle Set

100 g    max. 3 equivalent wax parts  
200 g    max. 5 equivalent wax parts  
300 g    max. 7 equivalent wax parts

### Speed procedure / process

After investing, allow the 100 g cylinder to harden at room temperature for 23 – 28 min. and the 200 and 300 g cylinder for 25 – 30 min. After removing the plastic base of the cylinder, place it into the preheated furnace / oven already set to a temperature of 850° C.



## Warning

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

## **Conventional (overnight) heating**

As the full setting expansion is reached with the overnight process, liquid concentration should be reduced by 5 – 10 %, depending on ceramic type and application..

Recommended heating rate:  
3 – 5 °C/min. (37 – 41 °F/min.)

In case of putting several rings into the furnace at the same time, increase preheating time by 10 min. for each additional ring.

## Recommendation / Warning

Ensure a ground clearance of at least 1 cm between ring and furnace ground.

Final preheating temperature: 850°C (1562°F)

Preheating time: 100 g cyl. – minimum 45 min  
200 g cyl. – minimum 60 min  
300 g cyl. – minimum 70 min

Max. thermal stability: 1200° C (2192° F)

The required press ceramic material is then added to the cylinder and put it into the press oven accordingly.

## **Cooling and Removing the Cylinder**

After the cylinder has cooled down to room temperature, please remove and clean abrasively according to usual techniques for pressable ceramic.

We recommend using 50 – 110 µm Aluminium oxide respectively 50 µm glass-beads at 2 - 2,5 bar pressure.

## Warning

This investment compound contains quartz and cristobalite. Avoid inhaling dust.

## **Packaging**

100 g pouches

## **Storage**

Store in cool and dry areas, and well closed, vapour-proof packages.  
Pay attention to expiry-date.

The above 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.