VarseoVest Pplus



Phosphate-bonded, rapidly heatable, precision investment material which has been specially designed for casting 3D-printed partial denture frames.

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VarseoVest P^{plus}, phosphate-bonded dental casting investment material:

Type 2 (For the production of complete or partial dentures or other removable restorations)

Class 2 (recommended for burning out during rapid heating up)

Safety instructions

Please read and follow the instructions in the insert

This material contains quartz and cristobalite which causes lung damage when breathed in during prolonged or repeated exposure. Suitable protection measures such as sufficient ventilation or wearing an FFP2 protective mask are recommended.

VarseoVest Pplus can be heated rapidly (shock-heat).

The possible insertion temperatures are 900 – 950°C (shock-heat).

General information



- Liquid for rapid preheating:
 - **BegoSol® K** (Warning: not frost-protected! Storage and transport temperature: + 5°C to + 35°C).

 Note: BegoSol® K is transparent in colour; if excessive crystallisation or streaking occurs or a sediment is formed, BegoSol® K should no longer be used.
- Before mixing, rinse out the clean mixing bowl with water and wipe out. Mixing bowls that are not clean or are dry
 withdraw moisture from the investment material!
- Working time 21°C: approx. 4:40 min
- Mix the liquid and powder thoroughly with a spatula for at least 15 seconds. Then mix for 60 seconds in a mixing unit (approx. 250-350 rpm), if possible under vacuum.

Investment



Preparation of the cast object

- Attach the sprues and funnel former to the cleaned print object (VarseoWax CAD / Cast). Deformation of the print object
 must be avoided; if necessary, supports are to be designed and also printed.
- Position the print objects(s) (VarseoWax CAD/Cast) on the funnel former of the BEGO mould former.
- A distance of at least 1 cm must be maintained to the mould edge and the mould top.
- Remove all grinding dust from the surface of the print object before investment.
- Fill the mould ring on the vibrator, then remove from the vibrator immediately.
- Allow the mould to set pressure-free for 20 minutes, alternatively let set the mould under pressure for the first 10 minutes of setting.
- Remove the mould ring 20 min. after investment and insert the moulds directly into the hot furnace at the set temperature!

Mixing		Mixing ratio 100 g powder: 20 ml mixing liquid				
for 1 casting mou	ld	VarseoVest P ^{plus}	BegoSol® K	Distilled water	Mixing liquid Total Concentration	
Liquid: BegoSol®	K	2 × 250 g	70 ml	30 ml	100 ml	70%*

Example Mixing ratio at 70 %	VarseoVest P ^{plus}	BegoSol® K	H ₂ 0	Liquid volume	Concentration
Liquid: BegoSol® K	1 × 250 g	35 ml	15 ml	50 ml	70%
	1 × 300 g	42 ml	18 ml	60 ml	70%
	2 × 300 g	84 ml	36 ml	120 ml	70%
	$1 \times 550 \text{ g } (250 \text{ g} + 300 \text{ g})$	77 ml	33 ml	110 ml	70%

^{*}Changing the mixing ratio results in a change in expansion: The higher the concentration of BegoSol® K, the greater the expansion — the cast gets bigger. A reduction in concentration reduces expansion and the fit becomes tighter.

	Silicone (Wirosil® plus)
Removal	after 30-45 minutes

Preheating



	Shock-heat		
Setting time after investment	Remove the mould ring 20 min. after investment and insert the moulds directly into the hot furnace at the insertion temperature!		
Insertion temperature*	900-950°C		
Holding levels	_		
	_		
Final temperature	900-950°C		
Hold times	at least 90 min (depending on size and number of moulds)		

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Risk of injury in connection with shock heating: Danger from explosive flames!

Place all moulds in the furnace within 10 seconds and then keep the furnace door closed for 20 minutes!

After casting



After casting, allow the moulds to cool down until warm to the touch in a protected and designated location, **do not quench in water!** Investment material contains quartz. Do not inhale dust! Danger of lung damage (silicosis, lung cancer). To avoid dust during deflasking, place the moulds in water once they have cooled down completely after casting until they are thoroughly wetted.

Data



Working time at 21°C approx. 4:40 min

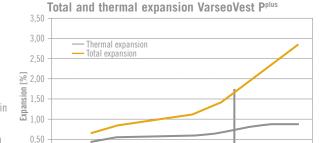
(70% BegoSol® K)

Characteristic material values in accordance with DIN EN ISO 15912

Beginning of setting
(Vicat time) approx. 8:50 min

Compressive strength
(after 2 hours) approx. 8 MPa
Linear thermal expansion approx. 0.6%
Flowability approx. 145 mm

This product was manufactured according to the specifications of DIN EN ISO 15912 and meets its requirements.



60

Concentration BegoSol® K [%]

70

100

Availability and recommendations



VarseoVest P^{plus} 1 box 18 kg = 72×250 g bags - **REF 54910**

1 box 18 kg = 60×300 g bags - **REF 54911** 1 box 6 kg = 20×300 g bags - **REF 54912**

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Silicone mould former	54877	VarseoWax CAD/Cast	41000	1 kg
Base with funnel for BEGO mould former, red	19650	Aurofilm	52019	(100 ml)
Base with funnel for BEGO mould former, blue	19651			

Our recommendations for use, whether given verbally, in writing, or by practical instruction, are based upon our own experience and trials and can therefore only be regarded as guidelines. Our products are subject to continuous development. We thus reserve the right to make modifications in design, appearance and materials without notice.



Manufacturer



Article number



Use by



Jarnina

Hotline +49 421 2028-380 www.bego.com



Date of manufacture



Batch code



Consult instructions for use