

Perfect Press Investment

Instructions for use

Description:

Perfect Press is a phosphate-bonded, graphite-free, fast cast investment with exceptional properties. It is especially developed for pressable ceramics.

Technical data:

Mixing liquid	UltraVest/Perfect Press Liquid
Powder/Liquid Ratio	100 g: 22 ml
Mixing under vacuum	60 sec.
Working time	5 – 7 min.
Setting time:	30 min.
Working temperature	71.6°F (22°C)
Initial setting time	9 – 11 min.
Setting expansion	approx. > 1.50% (100% undiluted liquid)
Recommended storage	Keep powder in a cool dry place, prevent liquid from freezing

Water/Expansion Liquid Ratios Example A:

		Pressable Ceramics at 950 °C (Low Fusing)			Pressable Ceramics at 1050 °C:				
		Evopress® (Wegold), Authentic™ PRESSCERAMIC (Ceramay), Finesse® (Dentsply), IPS Empress2, etc.			HeraCeram (Heraeus-Kulzer), IPS Empress® Esthetic, etc.				
		powder	liquid (ml)	water (ml)			powder	liquid (ml)	water (ml)
Crowns & MOD Inlays	50-[55]%	100g:	11 [12]	11 [10]	65-[70]%	100 g:	14 [15]	8 [7]	
		200g:	22 [24]	22 [20]		200 g:	28 [30]	16 [14]	
Inlays	55-[60]%	100g:	12 [13]	10 [9]	70-[75]%	100 g:	15 [17]	7 [5]	
		200g:	24 [26]	20 [18]		200 g:	30 [34]	14 [10]	

Water/Expansion Liquid Ratios Example B:

	Expansion Liquid (ml)	Distilled Water (ml)
Molars 75%	100g: 17	100 g: 5
	200g: 34	200 g: 10
Anteriors & Pre-Molars 75 – 80%	100g: 17 [18]	100g: 5 [4]
	200g: 34 [36]	200g: 10 [8]
Veneers 70%	100g: 15	100g: 7
	200g: 30	200g: 14
Inlays 40 – 50%	100g: 9 [11]	100g: 13 [11]
	200g: 18 [22]	200g: 26 [11]
MOD Inlay 70%	100g: 15	100g: 7
	200g: 30	200g: 14
Onlays 85 – 90%	100g: 19 [20]	100g: 3 [2]
	200g: 38 [40]	200g: 6 [4]

We recommend performing test injections based on the above concentrations to determine the correct ratios for the material and equipment utilized in your laboratory.

Mixing:

Use a spatula to stir the investment material by hand until the powder has been thoroughly hydrated. Place under vacuum for 15 seconds without mixing, then mix for 60 seconds under vacuum.

Working time:

Approx. 6 minutes at room temperature (71.6°F or 22°C). Temperatures above room temperature will shorten working time.

Investing:

Fill the ring with investment slowly. The use of a vibrator is only required to control the flow of viscous material, if required, use on low setting only. Avoid excess vibration! This will lead to the formation of bubbles and a breakdown of the mixture.

Bench Drying:

Bench set for 30 minutes. Timer should be started at introduction of powder and liquid.

Oven Preheating:

The burnout oven/ furnace should be preheated to 850°C (1560°F).

Burnout times:

Burn-out/Hold time should begin once final temperature has been reached.

100 g ring: 30 minutes

200 g ring: 40 minutes

Warning: Do not open furnace until the burnout cycle has been completed.

Caution: Remove the casting ring immediately from the furnace after completing the injection process. Place the ring on a grate or in a bowl with sand to cool-down to ambient (room) temperature.

Divesting:

Investment material should be removed with Garreco Glass Beads (50 micron).

Please note:

Technical recommendations are based on tests and findings from work in our laboratory and can only be regarded as guidelines. Garreco products are subjected to strict quality controls. We reserve the right to make technical changes. Further information can be obtained from Garreco technical services in Heber Springs, Arkansas, USA (800-334-1443) or from our sales representatives.

Caution:

Inhaling silica dust is a health risk. A NIOSH dust mask should be worn.