

HIRO VEST® CF 30 – Instructions of Use

Indications:

HIRO VEST CF 30 is a superfine universal investment for inlays, full and partial crowns, bridges, partial dentures frames, etc., made of precious and non-precious alloys, using wax patterns, plastic 3 D printed patterns and pattern resin.

Technical Data:

Processing Parameters	Recommended values	
Temperature of powder and liquid	21-23°C	
Mixing ratio (powder / HiroSol®) : 100g powder : 25 ml HiroSol®	Ring size	160 g (bag)
	1	90g : 22,5 ml;
	3	1 bag : 40 ml
	6	2 bags : 80 ml ;
	9	3 bags : 120 ml ;
Manual mixing time	15 seconds	
Mixing time under vacuum at 350 rpm	60 seconds	
Expansion	Linear expansion : 1 - 1,3 % Thermal expansion : 0,6 - 0,8 % Overall expansion : 1,6 - 2,1 %	
Compressive strength	9 – 10 MPa	

Important information :

Before use, always follow the instructions below:

- * Use a spatula and a mixing bowl just for HIROVEST® CF 30. Do not use the mixing instruments used for plasters.
- *Protect HIROSOL® special liquid against frost! Storage and transport temperature for HIROSOL® : +5°C to +35°C.
- *The best results are achieved if powder and special liquid are stored at 20-23°C.

Steps to follow:

- Before mixing, rinse the clean mixing bowl with water and wipe off. Mixing bowls that are not clean withdraw moisture from the investment material.
- Put in the liquid and add the powder.
- Mix thoroughly with a spatula for 15 seconds.
- Mix for 60 seconds in a mixing unit under vacuum, at 350rpm.

- Keep under vacuum for other 30 seconds, without mixing. If just mixed manually, mix it for 2 minutes, on the vibrating table at the lowest vibration level.
- Working time: approximately 6 minutes at 20°C. At higher temperatures, the working time is reduced.
- Fill the crowns carefully with a fine instrument. Fill the ring mold on the vibrating table, at the lowest vibration level.
- Do not vibrate anymore after filling!
- If heating has to be carried out without ring, remove the ring immediately after complete setting of the investment (30 minutes).
- Metal ring molds cannot be removed.
- The setting time is 10 minutes. After 30 minutes the linear expansion stops, so it can be left as long as necessary, no changes will occur if it's heated at a later time. Long waiting times are no problem, no volumetric changes will occur in the future metallic component.

		Shock heating method	Conventional heating method
Setting time after investing		30 – 35 minutes from mixing	At least 30 minutes
Initial temperature of furnace		700-900°C	Room temperature or 250°C
Holding time in min.		45 min	250°C (with 5°C/min) - 40 min
			580°C (with 7°C/min)– 30 min
			850-900°C (with 9°C/min)– 45 min
Final temperature	Precious alloys	700°C	700°C
	Non precious alloys	900°C	900°C



Risk of injury in connection with shock heating! Place all molds in the furnace within 10 seconds, close the door immediately and keep the furnace door closed for 15 minutes!

HIROSOL® - concentration		
Alloys	Precious: Inlays, full and partial crowns and bridges, partial denture frames, ring telescopes, full telescopes, groove shoulder attachments, etc.	Non precious - Cr-Co, Cr-Ni Inlays, full and partial crowns and bridges, partial denture frames, ring telescopes, full telescopes, groove shoulder attachments, etc., realized by using wax patterns, 3D printed plastic patterns, pattern resin.
	50%	100%

➤ HIROSOL® 130 special liquid is the concentrated HIROSOL®, sold separately.



MUTSUMI CHEMICAL INDUSTRIES
www.mutsumidental.eu; office@mutsumidental.eu