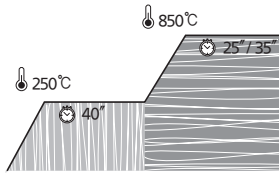


CASTING TEMPERATURE: 850°C



Maintain the cylinder at the final temperature for:

CYLINDER SIZE	HEATING TIME
1 x	25 min
3 x	35 min



After the casting has been completed, bench-cool the ring to room temperature.  
**Do not quench in cold water!!**

# Amber® Vest

Phosphate bound investment for casting press ceramics with normal or quick heating

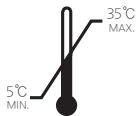
User's Manual

## STORAGE AND EXPIRY



### Amber Vest POWDER

Store at 18-25°C.  
Keep the packages tightly closed in a dry place.  
The investment is sensitive to moisture: prolonged exposure to the air may alter the characteristics of the product.



### EXPANSOR-B LIQUID

Store at 18-25°C.  
Prolonged exposure to temperatures lower than 5°C or higher than 35°C may produce freezing and/or destabilisation of the product.  
Do not use the liquid if it shows a sign of cristallization.  
Keep the bottles tightly closed after each use. Prolonged exposure to the air may cause crystallisation.  
Batch number and expiry date are marked on each package.

## SAFETY INSTRUCTIONS

This material contains silica. **DO NOT INHALE THE POWDER!** Continued inhalation of the powder may cause lung injury (silicosis or cancer).  
During handling, avoid the formation of powder. Avoid inhalation by using a suitable dust mask. Eliminate any spillages of powder with a damp cloth.  
Avoid the formation of powder during deflasking by submerging the cylinder completely cold in water. Extract the ammoniac vapours from preheating and emit them to the exterior.  
Avoid skin contact with the mixing liquid EXPANSOR. In the event of contact, wash with soap and water. In the event of contact with the eyes, wash under abundant running cold water and consult a doctor.

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## DESCRIPTION

Amber® Vest is an ultra fine, graphite-free, phosphate bound investment for casting press ceramics with the technique of NORMAL OR QUICK HEATING.  
According to ISO 15912:2006, the classification of the product is Type 1 Class 2.

## INSTRUCTIONS OF USE

As with all phosphatic coatings, the temperature of storage and preparation of the coating and of the mixing liquid is a determining factor in the expansion during setting, and therefore in the precision of fit and the cast surface. The optimum preparation temperature is 20-22°C. Any variation in the optimum working temperature, whether of the powder, liquid or mixing utensils, or significant variations in the ambient temperature, affect the behavior of the product.

### 1. LIQUID PREPARATION:



**IMPORTANT:** Amber® Vest must be always used with the special liquid EXPANSOR-B and distilled water. The dilutions can be effected by adding distilled or demineralised water, shaking slightly and then applying to the bottle an identifying label of the concentration made.

DO NOT USE EXPANSOR LIQUID WHICH HAS BEEN FROZEN (BECOME CRYSTALLISED).

**Concentrations of the mixing liquid: 70 % EXPANSOR-B + 30 % DISTILLED WATER**

### 2. PREPARATION OF THE CYLINDER

Metal ring and plastic or silicone cylinders can be used.

For 9x cylinders, use always metal ring.

- WITH metal ring:
  - Cover the inner part of the cylinder with a quartz band (for example RING-O-LINER). (1 layer for 1x and 3x cylinders / 2 layers for 6x and 9x)
  - Moisten slightly with water the band to prevent the absorption of the investment.
- WITHOUT ring (plastic or silicone cylinder, for example RING-O-EXPAND Press):  
Apply a fine layer of Vaseline to facilitate subsequent extraction.

### 3. PREPARATION FOR MIXING



- To obtain good results, it is essential to use the precise measurements.
- For greater ease of use, Amber® Vest is supplied in pre-dosed sachets of 100g, and a dosing tube is supplied for the liquid.
- It is recommended always to use whole sachets and to measure the liquid with the original dosing tube.
- In the case of using non-pre-dosed portions of powder, weigh the exact contents with a scale.

The powder-liquid proportion is: 100g powder/25ml liquid:

CYLINDER SIZE	POWDER	MIXING LIQUID
1 x	100 g	25 ml
3 x	200 g	50 ml
6 x	300 g	100 ml



**WARNING:**  
DO NOT USE BOWLS NEITHER CONTAINERS WHICH HAVE BEEN IN CONTACT WITH PLASTER.

### 4. MIXING



- Prepare the mixing liquid (EXPANSOR-B + distilled water).
- Add the powder to the liquid and mix briskly by hand for 15-20 seconds to obtain a totally moist and uniform mass.
- Then pass to mechanical **vacuum mixing for 60 seconds** depending on the mixer.

### 5. FILLING THE CYLINDER



Amber® Vest flows over wax surfaces without the need to paint them with degreasing agents. We recommend the application of a thin layer of TENSIO-WAX over the wax cast before the coating. When the mixing time is completed, fill the cylinder, vibrating gently, for 10-15 seconds, then stop.

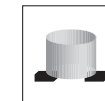
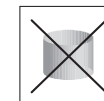
### 6. WORKING TIME



- 7-8 minutes** (20-22°C) from the moment that powder and liquid contact.
- The working time can be reduced when the liquid is at a higher temperature.
  - With ambient temperatures above 22°C.
  - With the use of contaminated utensils.

### 7. HEATING

#### PLACING IN THE FURNACE



**WARNING:**  
Wax ignition can lead to breakings. Place the cylinders inclined or over investment plates. Never place them directly on the oven base.

- Few minutes before placing in the furnace, scrape with a knife the upper surface of the cylinder to allow the gases to escape.
- Place the cylinders in the furnace with the spouts downwards.
- In the case of multiple cylinders, also avoid any contact between them.
- Due to the aggressive elimination of the wax, do not open the furnace while heating.

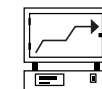
#### HEATING

Heating can be carried out in two different ways:



#### Fast heating:

After the mixing, place the cylinder in the furnace for 20-30 minutes at the final casting temperature.



#### Normal heating:

- Place the cylinder in the furnace after the setting.
- Dry at 250°C for 40 minutes.
- Heat up at 7°C / min. to the casting temperature.