

Amber® LiSi-POZ Instructions for Use

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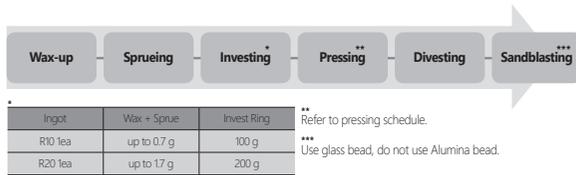
1. Overview

- Trade / Device Name : Amber LiSi-POZ
- Common Name : Dental Frame Material for Dental Prosthesis
- Intended Use of the Device : Amber LiSi-POZ Series are indicated for fabricating glass ceramic restorations such as single-unit anterior and posterior crowns, veneers, inlays/onlays and 3-unit bridges not involving molar restoration using hot press technique.
- Classification Name : Porcelain Powder for Clinical Use
- Packaging Unit : Refer to HASS standard package.

2. Instructions for use

(1) Preparation for use

Please check cracks or fractures on the products before use.



(2) How to use and handle

- Foundation firing go ZrO2 framework
 - Proceed with heat treatment for phase stabilization for 15 minutes at 1050°C
 - Proceed with Wash-firing with adhesion promoter for 5 minutes at 950°C
 - Coating thickness should be within 0.1mm
 - Cooling to room temperature should be long-term process.
- Wax-up
 - Prepare model. - Apply die spacer twice 1mm upper from margin.
 - Wax-up fully for staining. - Wax-up considering occlusion.

- Sprueing
 - Attach sprue considering smooth ceramic flow.
 - Attach on the thickest area of wax-up pattern.
 - Bridge should be invested in the 200g ring base. - Do not attach sprue on pontic.
 - Do not exceed the maximum length of 15 ~ 16mm including sprue and wax pattern.
 - Keep the sprue angle between 45 ~ 60°.
 - If the crown is viewed from the proximal, the longest side of the object should point outwards.
 - If attach one wax pattern, attach a dummy (blind) sprue on the other side.
- Investing
 - Measure the weight of wax pattern, then decide the size of ingot and ring.

	Small Ingot	Large Ingot (L)
Wax Weight	up to max. 0.75 g	up to max. 2 g
Invest Ring System	100 g or 200 g	only 200 g

- Keep powder and water ratio and mix in the vacuum mixer.
- Carefully fill the investment ring with investment material up to the marking and position the ring gauge with a hinged movement. Then keep the ring in a stable place not vibrating for 40 minutes.
- Preheat burnout furnace upto 850°C.
- Remove the ring gauge and separate investment ring from Silicon ring. Then preheat the investment ring upto 850°C in the burnout furnace. (40 ~ 60minutes).
- Be cautious that the failure of temperature maintenance results in pressing failure.

- Pressing
 - Loading the Separator applied plunger and the selected Ingot in the investment ring. Then operate the program.
 - Select the proper program depending on the furnace.
- Cooling
 - Cooling down investment ring slowly after pressing around 1 hour.
- Divesting
 - Mark the length of Alox plunger on the cooled investment ring.
 - Separate the investment ring using a separating disk, and separate the pressed objects.

(3) Storage and maintenance after use

- Do not store in package open or dirty place it may contaminate the products.
- Store away from moisture, direct sunlight, and heat.
- Do not reuse or recycle the remaining part once used.

3. Cautions for use

- Check the defects of the product for any damage or crack before use.
- Take care of burn when inserting Ingot into investment ring.
- Make sure plunger is well applied and dried up with parting agent before inserting.
- Inserting Ingot and plunger in the investment ring, and loading into the furnace should be finished in the shortest time.
- Cool down the investment ring to the room temperature after pressing procedure.
- Be careful not to inhale dust during divesting process and control for enough emission.
- Be cautious for separating disk not to damage the pressed object in separating from the investment ring.
- Product should be handled by dental technician.

4. Storage and Maintenance

- Store the product in room temperature and in a dry place.
- Pack and store the product properly to ensure that it is not damaged.
- Store the product at temperatures ranging from 0 ~ 40°C, in combination with relative humidity of 10% r.H ~ 90% r.H, under atmospheric pressures ranging from 500 hPa ~ 1061 hPa.

5. Mechanical and Physical Properties

- Material : Glass-ceramics
- Flexural Strength : over 300 MPa
- Chemical Solubility : below 100 µg/cm²
- Coefficient of Thermal Expansion : 10.1 (±0.5) x 10⁻⁶ K⁻¹

* This is a single-use product. * Do not reuse.

6. Pictograph

	Do not reuse		Caution		Catalogue Number		Consult Instructions for Use
	Batch Code		Date of Manufacture		Do not use if package is damaged		Non Sterile
	Manufacturer		Authorized Representative in the European Community				

Pressing Schedule

Translucency	Size	Shade	Investment Ring	Start Temp.	Heating Rate	Max Temp.	Holding Time	Vacuum On	Vacuum Off
HT	R10 / R15	A1, A2, A3, A3.5, W4	Small (100g)	700°C	45°C/min	915°C	15 Min	700°C	915°C
LT							30 Min		
HT	R20		Large (200g)						
LT									

Note

- There may be a little difference between the displayed temperature and the real temperature of each furnace. When you use the Amber® LiSi-POZ ingots, please verify that the above standard schedule is suitable for your press furnace. If it is not, please try to find the optimized pressing temperature through the following processes.
 - If there are some traces of tiny bubble on the surface of pressed restoration ⇒ Please reduce the maximum temperature by 5~10°C and try the pressing again.
 - If the marginal area of restoration is not formed completely ⇒ Please increase the maximum temperature by 5~10°C and try the pressing again.
- For the baking firing, rounded supporting pins and object fix putty should be used.
- When the Amber® LiSi-POZ is used for multi-unit bridge indication which needs two R10 ingots, then R20 ingot should be used to avoid air trap problem.