

Repeatable thermo-adjustable reline using Versacryl

ersacryl is a consistency controllable thermo-elastic acrylic with memory. The material that most people compare Versacryl thermo-adjustable liner with is Molloplast B. Molloplast B is rubber while Versacryl is acrylic.

A rubber liner acts like a spring; it compresses under occlusal load and springs or bounces back to its processed shape immediately when occlusion is disengaged. The perception of being soft is giving little or no resistance to pressure. Tissue reacts differently when compressed; it returns to its shape slowly. Tissue has a slow reaction time. What Versacryl offers can best be described as a compressive or cushioning action. When a denture is under occlusal load, the tissue will compress first, then loading will continue and the Versacryl liner will yield under that load. When occlusion is disengaged, the tissue along with the Versacryl liner will start to return to their previous shape, maintaining intimate contact between denture and mucosa. The Versacryl thermo-adjustable liner should not be viewed as a substitute for Molloplast B, but rather as an aid in achieving a better fitting and more comfortable denture. A Versacryl repeatable thermo-adjustable reline should not be prescribed as a soft-liner.

As denture providers, the most desirable features of the Versacryl thermo-adjustable reline are:

1. It is a cross-linked acrylic;

2. Chemically bonds to other acrylics and itself;

3. The polished fitting surface and salivary action achieves adhesion; and

4. Denture can be readapted by warming and reinserting (by the denture provider or patient, after instruction).



Figure 1. Roughen and prepare margins: square margins increase surface area, provide neat finish and reduce the time necessary for trimming.



Figures 2 and 3. Prime with hard liquid (letf) and then pour and let run over the surface of the denture (right).



Figure 4. Stretch and apply: Do not knead, you will include bubbles.



Figure 5. Wrinkles indicate the material is underpacked. Trial packing increases density of material.

To reline a new denture: Heat cure method (Heat cure is always preferable to self cure)

- 1. Flask, boil out and separate, the denture wax-up as usual.
- 2. Pack regular pink denture acrylic with the spacer 2-3mm. Add a separating sheet and trial press. Leave for 2 to 2.5 hours under press for acrylic to harden.
- Mix Versacryl liquid and powder 1:1.5 ratio by weight. When mixing, add powder to liquid while stirring gently until the powder is completely saturated and a smooth and creamy consistency (no lumps) is achieved.
- 4. Open flask, remove spacer and prime acrylic with hard liquid (Figure 2). Pour some Versacryl (Figure 3) over the denture surface and wait 5 minutes for Versacryl to harden slightly.
- 5. Wet fingers (water only) and remove Versacryl from mixing cup. Stretch out and apply to denture (leave some for trial-packing).
- 6. When a smooth surface is achieved on the packed Versacryl liner, close the flask and heat cure process to acrylic denture base instructions.

To reline an existing denture: Heat cure method

- 1. Packing instructions as above. **Tip:** apply a fresh layer of acrylic then prime with hard liquid and pack Versacryl.
- 2. Take to boil and process for 20 minutes.

Self Cure Reline:

Pack as above and process in hot water or hydroflask for 20 mins at 50-60°C.



Figure 6. No wrinkles indicates correct packing. Close flask and process.



Figure 7. Processed. Note undercuts and smooth surface.



Instructions for adjusting a versacryl reline

At body temperature, Versacryl relines are designed to adjust themselves in the mouth to the contours of the gum. If discomfort occurs, the reline is adjustable in the following manner:

- 1. Immerse and soak the denture in a bowl of hot water for about 2 minutes at approx. 80°C.
- 2. Quickly dry off all the excess water and insert in the mouth.
- 3. Slowly find the correct bite, then clench hard for 2 seconds.
- 4. Do not warm the denture to remove.
- 5. This procedure can be repeated as often as necessary, until the desired level of comfort is reached.





Figures 11-18. Examples of what is possible.





Figures 8-10. Trim the denture at approximately 8,000rpm with diamond bur, then silicone point. Tip: to trim, place in cold water or bag in the fridge until rigid; use pumice with single row brush, then high shine to polish surface. Mixing ratio 1:1.5 by weight.

If sore spots occur, the reline material can temporarily be moved out of the way, simply by warming the denture, pressing on the area that caused the pain and holding while cooling under cold water. By re-heating the denture afterwards, the reline will automatically return to its original shape.

NOTE: Tablet-type cleaners are not to be used.

For more information please, call Ultimate Dental Supplies on 1800-636-801.

