

BUMPS DOWN AND DIRTY. Casting and Finishing

LATEX SHELL BUMPS

You'll need: Cheap disposable brushes
Shellac, white or natural
Casting latex, or mold latex (I'll list some sources at the end)
Cheesecloth (optional)

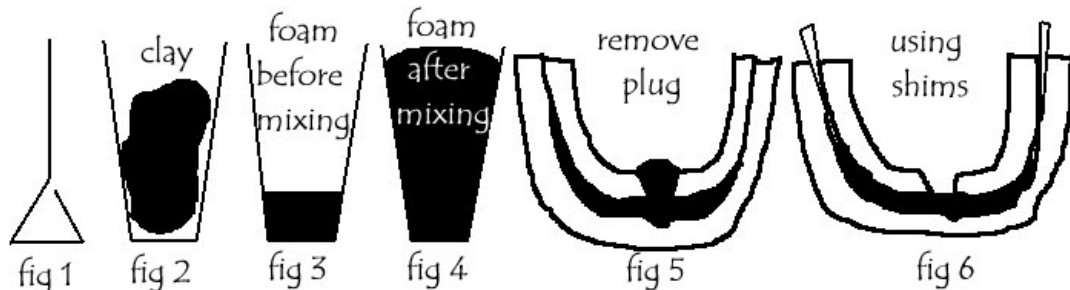
Start with a perfectly dry mold. If you have done any sanding of patched imperfections, make sure to remove sanding dust with a damp cloth, then allow to dry again, if necessary. I used to seal all my molds with shellac, but sealed molds take longer to dry between coats of latex. Now I'd seal only all plaster bandage molds--they aren't as strong as those whose base layer is plaster alone. Make sure the sealer is dry. How? Wet shellac can be sticky and the mold may be cool to the touch. Dry molds, sealed or unsealed should feel NOT cool. I dry mine on top of the fridge.

Using a brush dampened with distilled water, apply even layers of latex and allow it to dry past the milky stage between coats. Squeeze out the excess latex from the brush and store the brush in distilled water. Hard water causes the latex to clump on the brush, wrecking it that much faster. I prefer mold latex because it is meant to be brushed on and has less filler than casting latex, so doesn't shrink as much. I use the gentle heat above the fridge to aid drying. I've tried other heat sources--slow ovens and hair dryers, and if you heat the mold too much or unevenly, you may get bubbles and shrinkage. The fridge method allows you to do 2-3 layers each day. You may imbed a thin layer of cheesecloth after the first 3 layers for added strength. I used cheesecloth or gauze on my larger Borg pieces, and on parts I want to be really stiff, but I no longer use it on Klingon prosthetics. You'll need 8-12 coats of mold latex to make a sound prosthetic. Once your prosthetic is completely dry, gently peel it away from the mold and place it on a wig form to air cure overnight. Place the bumps on your face and mark so that when you trim, your own brows are covered, but you can still see. You can over trim, so be careful.

URETHANE BUMPS

You'll need:

- The lump of clay from your mold
- More plaster, possibly
- Drill and 1/2" bit
- Shellac, brush
- Urethane foam kit--(I use GM foam) part A, part B, mold release
- A good scale (I have an Ohaus triple beam balance)
- Latex or vinyl gloves
- Paper cups and disposable scrapers (I use chunks of cardboard)
- Mixing tool (I use a bent coat hanger inserted into a drill)(fig 1)



Preparing the two molds for urethane requires additional work. The molds need to be 1/2-3/4 inches thick to withstand separation once the foam is set. After you have removed the clay, but while the plaster is still damp, mix and add more layers of plaster to the outside of each mold. Drill a 1/2" hole into the inner mold (the one that's your face) to relieve excess pressure from the foam, and then smooth the rough edges of the hole with plaster. The smoother all of the edges of the mold are, the less the foam will stick if it spills over. Allow the molds to dry thoroughly. Urethane HATES moisture, seal all surfaces with shellac-- one coat is enough.

Let that dry thoroughly. The next two layers are mold release. I'd use the one provided in the kit on the surfaces inside the molds, but if you have some paste auto wax, use that elsewhere on the mold to keep the urethane from sticking to outer areas. Allow release layers to dry, then buff with a soft cloth between coats.

Next, figure out how much foam you need. Drop the ball of used clay into one of the paper cups. (fig. 2) It represents the volume of the foam prosthetic--expanded. The foam expands to 5-6 times the original volume of the chemicals. (figs. 3-4) The clay will give you a hint about the size of cups to buy, as well. You could weigh the clay, and then divide by 5 to get a rough idea of the weight of the A-B mixture. You use between 60-70 parts A to 40-30 parts B by weight. A higher proportion of B makes the foam stiffer, less makes the foam softer. Insufficient B will keep the foam from setting. Humidity and temperature affect the outcome as well. Be sure to read the instructions and experiment before

casting the actual prosthetic. Always wear gloves when working with foam--the stuff sticks like crazy to skin when mixed!

Timing is everything when using urethane. The two parts must be blended together evenly, a matter of 10-15 seconds. Stop mixing when the foam starts to develop or you'll get coarse bubbles in the mix. Pour the foam into the outer mold, and then close the inner one over it. You may wish to clamp the molds shut. Excess foam should spill out of the hole in the inner mold. This keeps the thin edges from being compressed. The foam should set in 15-20 minutes. Opening the mold is kind of tricky. Gently pull off the foam plug on the inside mold. (fig. 5) Then using wood shims, start to pry the molds apart. (fig. 6) Work gradually and allow the foam to unseal at its own pace or you may rip the prosthetic. Foam that is the proper consistency and thinness will tear away at the edges. This makes the seam less noticeable when applied. If your first efforts are too thick or stiff, don't be afraid to trim with scissors.

FINISHING UP-- I shall offer several options at this point. Choose the one that works for you.

Mask Make-up-- comes in grease and water based forms. DO NOT USE REGULAR MAKE-UP ON LATEX OR URETHANE. Mask make-up uses castor oil as its base. This vegetable oil is very sticky and will not attack the latex or foam like regular greasepaint. There is a castor oil mask sealer you may use on your prosthetic, and then use your regular make-up over that. You can also use the mask make-up base, and then do contouring and highlighting with standard greasepaint. You may want to nuke your mask make-up in the microwave to soften it for application. Please note: do not use castor oil products on your skin--it's horrible to remove. The water based mask make-up may also be used on the skin, but it is expensive. The Klingons I know who use it love it, but they use it to blend to their natural skin color. I've tried it, but I like to darken my skin and I find that, even with the spray setting stuff available, grease paint holds up better and is more cost effective for me considering the large skin area I make-up. As with any other forms of make-up, use powder to set mask make-up.

Painting Prosthetics is possible. Remember that Liquitex Artist acrylics are acrylic *latex* paints. For latex prosthetics, I mix a color that matches my greasepaint *on my skin*, then add 25% latex to the mix for better adhesion, then sponge the color onto the latex. The thin layer of paint helps protect the prosthetic from UV rays. For urethane, seal the foam with a thin coat of Pros-Aide, a very sticky medical adhesive, let dry, then paint a very light coat of color diluted with distilled water. If you can airbrush, go for it! Blending color is tricky, depends on the light source and the colors used to mix. I avoid artificial hues and try to stick to earth tones as much as possible.

OK! Enough for this time already! I'll deal with applying prosthetics and wigs in another article. I do want to list some sources for the supplies needed so far:

Grocery-pharmacies: petroleum jelly, latex gloves, Saran Wrap

Hardware stores: gloves, plaster of Paris, tarps, shellac, brushes. Cheesecloth

Food service supply stores: paper cups, cheap mixing bowls, and cheap scrapers.

Art, craft and hobby stores: acrylic paint, mold latex, hydrocal (model railroad stores) plaster bandage, dowel rods, modeling clay.

American Science and Surplus retail stores and catalogue: dental tools, triple beam balances and assorted weird stuff.

www.sciplus.com, 847-982-0870, 3605 Howard St, Skokie, IL 60076

Cybergraphic Designs: make-up, GM foam, Pros-Aide, adhesives, casting latex, foam latex prosthetics, instruction tapes and books and much, much more!.

www.getspfx.com, 800-GET-SPFX, 3202 Center Dr, Cleveland, OH 44134

Dick Blick: art and craft supplies, retail and by catalogue--mold latex, sculpture tools, modeling clay

800-447-8192, PO Box 1267, Galesburg, IL 61402-1267

GM Foam: urethane foam

818-908-1087, 14956 Delano St, Van Nuys, CA 91411

Kryolan Corporation: make-up, GM foam, other theatrical supplies

415-863-9684, 132 Ninth St, San Francisco, CA 94103-2603

Poly Product Corp: mold latex

810-774-2500, 28314 Hayes Ave, PO Box 42, Roseville MI 48066

Tri-ess sciences: Pros-aide

800-274-6910, 1020 W Chestnut St, Burbank, CA 91506

Artifacts by q'IDar (that's me!): latex shell prosthetics, and lots of quatermasterly advice.

<http://www.qidar.com>.