

## Repair Materials

These materials should be used after glaze firing to repair pieces that have broken, or to re-sculpt missing parts. The epoxies listed here are archival and industrial. This means that they will last longer and not weaken due to sunlight, or temperature changes.

### Gluing broken pieces

PC-11 (white) or PC-7 (black) is best for re-attaching broken pieces. You will need rubber gloves, popsicle sticks, plastic plates or cardboard, and a metal palette knife. PC-11 can be made less sticky with spit for getting correct amounts. You can also use rubbing alcohol and a brush to smooth out wet PC-11. This epoxy takes about 24 hours to cure fully and has a work time of around 30-45 minutes. As it stiffens it can be cut with an exacto knife, when fully cured it can be sanded, Dremeled or painted. It can also be colored by adding dry pigments (I use paint pigments, but any dry pigment should work)- this can be helpful if you are trying to match a glaze. Available on Amazon or Hardware stores.



### Tips:

Always use gloves when mixing these epoxies! They are difficult to remove from skin and can be very sticky and messy if not controlled.

Clean tools and palette knife immediately with rag and rubbing alcohol to allow reuse. Blue "shop rags" work great for cleaning off gloves during mixing also.

Do not mix in acrylic paint to add color or anything that has plastics or polymer in it, this will impede the set time.

Always mix in exactly equal parts A and B. Set time and strength could be affected if parts are unequal. Keep your mixing plate and write down time mixed to check the set of your epoxy.

For small parts just let the stickiness of the epoxy hold the piece in place, then lightly sand to remove excess after PC-11 cures. For larger attachments use wet clay, tape, or supports to hold the piece in place while the epoxy cures.

The cure time can be affected by temperature. In the cold the epoxy will take longer to set. If you place the piece in a kiln or oven and hold at around 250 degrees you can accelerate the set time.

Scoring up clay surfaces that you intend to glue later, for hangers, mixed media additions, etc. can help the epoxy hold better in those areas.

## For Filling Cracks and Sculpting Additions

Aves Apoxie Sculpt or Fix it Sculpt is a great material if you need to replace broken pieces or fill any size cracks in ceramic sculpture. You will need gloves to mix it, and usually some water to smooth with. Plastic tools work well if you are sculpting textures or shaping. There is about a 2-hour work time depending on which kind you get. Apoxie sculpt or Apoxie Clay. This material comes in white, black or can be purchased in several other colors, and will take color from added dry pigments. It can also be sanded, Dremeled/carved and painted when cured.

See more info, videos, and purchase here: <https://www.avesstudio.com/>

You can also buy this material on Amazon or through taxidermy supply companies like Van Dyke's.



**Tips:**

Don't add too much water when sculpting or material becomes slippery and difficult to manage.

When filling cracks overfill a little and sand down to make a flush surface.

Will stick if adding on a small part but should not be relied on for gluing pieces. For example, you can re-sculpt a missing ear and put it back on, but don't use it to fix a broken leg.

You can use silicone texture mats and regular clay tools to match the textures of your piece

Great for filling in blow outs on pieces. Fill in missing chunks that blew off, smooth with water, or texture and sand edges to create an even surface with the clay.