

## **Casting Resins**

There are primarily three types of resins that are used pen turning applications- Polyester, Epoxy, and Polyurethane. All three are thermosetting resins and have varying characteristics.

### **Polyester Resins:**

Douglas and Sturgess

[http://www.douglasandsturgess.com/mm5/merchant.mvc?Screen=PROD&Store\\_Code=DAS&Product\\_Code=PR-1008&Category\\_Code=POLYESTERRESINS](http://www.douglasandsturgess.com/mm5/merchant.mvc?Screen=PROD&Store_Code=DAS&Product_Code=PR-1008&Category_Code=POLYESTERRESINS)

US Composites Silimar 41

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

Polyester Casting Resin- Hobby Lobby

Cost varies by volume, brand and source. \$0.57 to \$1.81 per oz.

Cure Time- 12 to 24 hours depending on ambient temperature. Faster when warmer.

Mixing- forgiving.

Pros- cost if bought in volume, good for colored blanks, pressure pot not required, not impacted by moisture.

Cons- brittle, shrinkage, adherence.

### **Epoxy**

Liquid Diamonds- Amazon

Alumilite Amazing Clear Cast- Amazon, Hobby Lobby

Alumilite Amazing Cast (not clear)- Amazon, Hobby Lobby

Cost varies by volume, brand and source. \$0.60-\$1.18 per oz

Cure time- sets after 12 hrs but needs a week or longer for full curing

Mixing- by volume, somewhat forgiving

Pros- strength and durability, good adherence, no shrinkage.

Cons- long cure time

### **Polyurethane**

Alumilite Clear- Amazon

Cost varies by volume- \$0.78-\$1.23 per oz

Cure Time- 1 hour or so

Mixing- by weight, requires precision.

Pros- Strength and durability, good adherence, no shrinkage

Cons- requires pressure pot, zero tolerance for moisture, must have scales for mixing.