

**Inlace Acrylester™** Dave's Scale of difficulty rating = Highly Difficult, 8 to 9½ depending on the skill level and experience of the turner.

### GENERAL INFORMATION

Inlace Acrylester™ is the Trademark name for blanks manufactured by WoodTurningz™. Although they make gorgeous pens, they have been called some of the most difficult blanks to use because their hardness and brittleness makes them very prone to chipping. The WoodTurningz™ Diamond Series and Genesis Blanks are also made using Inlace Acrylester™.

Inlace Acrylester™ is a polyester resin based material called PolyLite® 32153 that is manufactured by Reichhold. One of the features of the material is that it is designed to be loaded with fillers to the 50% to 70% range, for pen blanks this typically means it is densely filled with vibrant dyes, pigments, and powders. According to Reichhold, PolyLite® 32153 is a series of rigid, low reactivity, medium viscosity casting resins that was specially formulated to use in the manufacturing of cultured onyx and granite. It has a translucent water-white color and accepts high filler levels with excellent filler suspension qualities and it provides consistent performance batch to batch.

### ACCORDING TO THE MANUFACTURER / OWNER

According to WoodTurningz™ these pearlescent blanks look incredible when finished and have amazing depth and sparkle/reflectivity when viewed in the light. In an IAP post from December 2009, WoodTurningz™ indicated that they acquired the product line/formula/brand in or around 2003 and they have modified their materials over time to achieve better working properties. WoodTurningz™ also provides an instruction sheet that provides on how to work with the hardness and brittleness of the material.

For example, WoodTurningz™ recommends not drilling through the bottom of the blank, but cutting the blank longer than needed, drilling to the depth based on the length of the brass tube, and then cutting off the excess at the end to expose the bottom of the hole. They also recommend that no more than ⅛ to ¼ inch be drilled before removing the bit for cooling and for clearing the flutes. WoodTurningz™ recommends making light cuts using sharp carbide tools with Negative Rake Cutters for turning as "Aggressive cuts and Inlace don't mix" and that dull tools can cause severe chipping.

### COST AND AVAILABILITY

Inlace Acrylester™ blanks are primarily available from WoodTurningz™ but are also carried by other distributors. They come in over 150 standard colors along with some Limited Batch specials. They typically cost in the \$4 to \$5 range as of the time of this writing.

### PERSONAL OBSERVATIONS AND OTHER COMMENTS

Inlace Acrylester™ is often called one of the most difficult types of materials to use and many problems associated with cracking and chipping during drilling, barrel trimming, and turning are reported. Many have also reported that it is far too brittle to be threaded so it would not be a good choice for kit-less/ bespoke pens. To reduce chipping, in addition to the instructions from WoodTurningz™, other IAP members, including myself, recommend sawing or sanding the corners off to make the blank more cylindrical before turning. Even though they are some of the least expensive blanks and can be extremely difficult to work with, the rich vibrancy and quality of the finished pen can make the end results well worth the extreme patience and extra effort required.

### DIFFICULTY RATING

Due to the formulation for use in manufacturing cultured stones, the instructions provided by WoodTurningz™, personal experience, and the reported experiences of many IAP members regarding it's hard and brittle nature, on Dave's Scale of difficulty where 1=it almost turns itself and 10=problematic and most difficult, I rate Inlace Acrylester™ at an 8 for skilled and experienced turners and a 9½ for less experienced turners (probably should be a 10). It is simply not a good introductory choice for turners just starting out.

**PICTURE OF INLACE ACRYLESTER PEN BLANK** (Inlace Acrylester™ #45, PEACOCK, from WoodTurningz™, note the brittle/chipped edges)



**PICTURE OF COMPLETED PEN USING INLACE ACRYLESTER** (Inlace Acrylester™ #45, Peacock from WoodTurningz™. The kit is a Satin, Designer NT from PSI. A durable, high gloss is possible even without additional finishes or waxes being applied).

