

# Liquid Stringer Medium



Liquid Stringer Medium (LSM) is a specially designed vehicle that can be mixed with any brand or form of crushed glass, frits, powders or enamels to make a formable pate-de-verre or paste of glass. At room temperature, this glass paste can be molded or formed in a variety of ways. It can be sculpted into 3-dimensional forms, squeezed from a cake decorator or squeeze bottle, painted into a pate-de-verre mold, or formed into decorative pattern bars. When fired in a kiln, the glass particles bond together forming a solid. Depending on the time spent and the temperature the glass is heated to, a variety of looks can be achieved from the same frit form ranging from granular, barely bonded, to solid dimensional relief images to fully fused flat plates, jewelry and tiles.

Liquid Stringer Medium is a unique clean burning, water soluble binder that offers easy clean-up with water, an extended working time, when dry it can be carved and it will hold the glass particle until they are hot enough to bond to themselves.

## PIPING



The most basic use of the LSM is as a piping medium. Lines of glass can be added to a single unfired piece of glass or they can be added and texture fired to a pre-fused glass blank. The process is the same, but the heating and annealing part

of the firing cycle will be based on the size and thickness of the base glass.

Mixture - 1 to 1- Ideally this mixture is just thin enough to flow out of the applicator with out being to runny.

Firing - Results will vary from kiln to kiln, but a good starting point would be 500 DPH up to 1350F with a 10 to 30 minute soak.

Variations - 1. Place more than one color in the applicator but don't mix them. Let them come out as a multicolored line.

2. Add a little more LSM to change the consistency of the mix to get flatter lines.

3. Make a lot of lines. Let them dry overnight and then carve away sections. 4. Crisscross and overlap to create a weave design. 5. Sign your work. 6. Make designs directly on to the kiln shelf and fire to make glass lace. 7. Make open designs with the piping line. Fire, then fill the cells with a runny mixture of LSM and glass. 8. Embossing dichroic glass.

## COLD COMBING



Cold combing is a great way to achieve the details of combed glass without having to work inside of a hot kiln. The process is simple: squeeze out some lines of LSM mix and comb away.

Mixture - 1tbs LSM to 1tbs powdered frit - with the addition of 1/4 tsp water. Ideally this mixture is just thin enough to flow out of the applicator with out being to runny. A 1/8 tsp drop should travel between 1/2" and 1" down a 45 degree ramp in 10 seconds.

Firing - Can be fired to any temperature - at 1350F with a 10 minute soak will produce a granular appearance. The hotter you go the smoother the finished surface. Tip - allowing the piece to dry completely before firing will minimize the number of bubble in the surface of the combed area.



## GLASS CLAY

Glass clay opens the doors to infinite possibilities. It can be sculpted, forms, mixed and manipulated just like colored clay. It has a consistency similar to Play Dough.

Mixture - 1tbs LSM to 2-3tbs powdered frit - keep adding powder as long as you can get it to mix. The goal is to keep adding powder until the mix no longer sticks to the mixing pallet. If the mix cracks when you form it, you need to add a little more LSM.

Firing - Can be fired to any temperature - at 1350F with a 10 minute soak will produce a granular appearance but will hold its shape. The hotter you go the smoother the finished surface but you loss dimension.

1350 with a 10 minute soak will produce a granular appearance. The hotter you go the smoother the finished surface.

Tip - Can be fired wet, but allowing the piece to dry completely before firing will provide an opportunity to clean and carve the piece before firing.



Pattern Bars  
Wet Sculpt  
Dry Carve

The Morton  
Liquid Stringer  
Caddy



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