



## *Branches, Pine Cones and Needles, and Assorted Small Leaves*

*Here are instructions and tips for creating thin and delicate castings with these three molds.*

Always start by priming Colour de Verre molds. There are two products that can be used: Hotline Primo Primer™ and ZYP BN Lubricat.

With either product, clean the mold with a stiff nylon brush and/or toothbrush to remove any old kiln wash or boron nitride. (This step can be skipped if the mold is brand new.)

To use ZYP, hold the can 10 to 12 inches from the mold. Apply a light coat using a three second

burst of spray in a sweeping pattern across the mold's cavities. Do not saturate the surface. Set the mold aside for five minutes so it can dry. If the mold has never been used with ZYP before, apply a second coat using another three second burst of spray. Let the mold dry for ten to fifteen minutes. The mold is ready to fill. ZYP will result in fewer casting spurs and crisper detail.



See our website for more instructions and videos about priming Colour de Verre molds with ZYP.

If you are using Hotline Primo Primer, mix the product according to directions. Apply the Primo Primer™ with a soft artist's brush (not a hake brush) and use a hair dryer to completely dry the coat. Give the mold four to five thin, even coats drying each coat with a hair dryer before applying the

next. Make sure to keep the Primo well stirred as it settles quickly. The mold should be totally dry before filling. There is no reason to pre-fire the mold.

### **Branches**

There are three branches in the mold which hold 7, 23, and 32 grams. Thus a filled mold weighs 62 grams more than an empty mold.

Weigh the primed mold and note its weight. (A good tip is to simply use a pencil to write the weight right on the mold.) Sprinkle a bit of fine Medium Amber into the mold to highlight the bark. Mix three parts fine Pale Amber with one part fine Medium Amber. Place the mold back on the scale and add the frit mixture to the three branches until the scale registers the mold's weight plus 62 grams. Use a small paint brush to distribute the frit evenly. Fire according to the table below. After firing, use the slumping surface on the mold's reverse side to give the branches added life.

### **Small Mixed Leaves**

Each Small Mixed Leaves mold incorporates five leaf designs. These hold 2, 3, 4, 5, and 7 grams. So the a filled mold will weigh 21 grams more than an empty mold.

### **Tools**

- ✓ Colour de Verre molds
- ✓ Small primer brush
- ✓ Small containers for mixing frit
- ✓ Digital scale

### **Supplies**

- ✓ Hotline Primo Primer or ZYP BN Aerosol
- ✓ Assorted frits

## REUSABLE MOLDS FOR GLASS CASTING

Keeping this in mind, weigh your primed Small Mixed Leaves mold

and note its weight. Put about 1/2 gram of fine Dark Green frit in each leaf. Tap the mold until the frit settles into the leaves' veining. (You can use a dry paint brush to make adjustments.) Place the mold on the scale and evenly distribute fine Citron frit into the leaves. Keep adding frit until the scale reads 21 grams more than the empty mold. Again, use a small paint brush to distribute the frit evenly. Fire using the Paper-Thin firing schedule below. After firing, use the slumping surface on the mold's reverse side to give the leaves added life.

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Put about 1/2 gram of fine Dark Green frit in each leaf. Tap the mold until the frit settles into the leaves' veining. (You can use a dry paint brush to make adjustments.) Place the mold on the scale and evenly distribute fine Citron frit into the leaves. Keep adding frit until the scale reads 21 grams more than the empty mold. Again, use a small paint brush to distribute the frit evenly. Fire using the Paper-Thin firing schedule below. After firing, use the slumping surface on the mold's reverse side to give the leaves added life.

the bottom of the mold. Tap the mold so the Dark Green frit settles into the needle grooves.

Fire according to the table below.

Next, the needles side: Use fine Medium Amber to fill each stem. Use a small paint brush to move any stray frit into place. Sprinkle enough fine Dark Green frit into each cluster to just barely cover



### FIRING FOR BRANCHES AND PINE CONES <sup>1</sup>

Casting	Seg 1	300°F (150°C)/hour to 1350-1375°F (730-750°C), Hold 10 minutes
	Seg 2	AFAP to 960 (515°C). Hold 30 minutes
	Seg 3	Off, cool kiln, no venting
Slumping	Seg 1	300°F (150°C)/hour to 1225-1250°F (660-675°C), Hold 5 minutes
	Seg 2	AFAP to 960 (515°C). Hold 30 minutes
	Seg 3	Off, cool kiln, no venting

1. Firing schedules are for COE 96 glass. For COE 90 glass, increase temperatures by 25°F (15°C)

### PAPER-THIN FIRING FOR NEEDLES AND SMALL LEAVES <sup>1</sup>

Casting	Seg 1	300°F (150°C)/hour to 1325-1375°F (715-745°C), Hold 10 minutes
	Seg 2	Off, cool kiln, no venting
Slumping	Seg 1	300°F (150°C)/hour to 1225-1250°F (660-675°C), Hold 5 minutes
	Seg 2	Off, cool kiln, no venting

1. Firing schedules are for COE 96 glass. For COE 90 glass, increase temperatures by 25°F (15°C)

### Pine Cones and Needles

First, the pine cone side: There are four pine cones in every mold that hold 12, 18, 23, and 30 grams of frit. Weigh the primed mold and record its weight. The filled mold will weigh 83 grams more than the empty mold.

Create a mixture that is one part fine Medium Amber and three parts fine Pale Amber. Place the

## REUSABLE MOLDS FOR GLASS CASTING

Weigh out 15 grams of fine Water Clear frit and distribute this evenly across the three designs. (We often refer to the process as “back filling.”)

Fire using the Paper-Thin firing schedule below. The low temperatures of this firing schedule are designed to keep the frit from “balling up” from the glass’ surface tension.

