## Kiwi Leaf

***Kiwi vines are a common sight in Portland gardens. Their big, broad leaves create lush canopies when grown on arbors and pergolas. Colour de Verre's Kiwi Leaf has a bonus: On the mold's reverse side there is a slumping surface on which cast leaves can be turned into perfect salad plates.***

This mold started as a leaf from a kiwi vine that grows in the front of our studio. The leaves cast from the resulting mold can be turned into small plates, sweet dessert bowls, and combined to form larger platters or wall art.

### Priming the Mold

Always start by priming your molds. There are two products you can use: Hotline Primo Primer™ and MR-97 Boron Nitride Spray.

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.)

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.

The first time MR-97 is used on a mold, it is necessary to apply two coats of the product. Hold the can 8 to 10 inches from the mold. Apply the first, 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. Once dry, 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. MR-97 will result in fewer casting spurs and crisper detail.

See our website's Project Ideas section for more instructions about priming Colour de Verre molds with MR-97.

### Filling the Kiwi Leaf

The suggested fill weight for the Kiwi Leaf mold is 190 to 200 grams.

To accentuate the mold's details, one to two grams of Black powder is sifted into the mold. Before opening the jar, put on a dust mask as it always best to wear a mask when working with glass powders or other fine particles.

Place a small sifter on a piece of paper and load the sifter with some of the powder. Hold the sifter over the mold and tap the sifter to distribute a fine layer over the mold's surface. Use a small paintbrush to brush away any errant powder from the mold's top edge.

## Availability

***Colour de Verre molds are available at fine glass retailers and many online merchants including our online store, www.colourdeverre.com.***

### Tools

- ✓ Colour de Verre Kiwi Leaf mold
- ✓ Medium primer brush
- ✓ Digital scale
- ✓ Sifter
- ✓ Assorted measuring spoons

### Supplies

- ✓ Hotline Primo Primer™ or MR-97 Boron Nitride
- ✓ Assorted powder and fine frits

In a large, lidded container, combine 12% (24 grams) of Moss Green fine frit and 12% (24 grams) of Light Green fine frit and 76% (152 grams) of fine Water Clear frit. Shake the container. Since glass dust is created by mixing the two frits, put on a dust mask before opening the container.

Use a small spoon to layer the frit mixture into the mold. Apply the first three-quarters of the frit mixture evenly into the mold. Use the last one-quarter of the frit to increase the frit depth around the leaf's center.

Fire the mold according to the Casting Schedule. The firing schedule's low target temperature and long hold will prevent the frit from becoming too liquid and balling up due to surface tension. This will keep the leaf thin and delicate.

## Slumping Individual Leaves

The easiest way to shape individual Kiwi Leaf castings is to use the integrated slumping surface on the mold's reverse side. Using the same methods described above, prime the slumping surface with either Hotline Primo Primer or MR-97. Position the leaf on the primed surface with the textured side up and place the mold into the kiln. Follow the Individual Leaf Slumping Schedule below.

To create bowls, use Colour de Verre's 7-10" Bowl Slumper and follow the same Individual Leaf Slumping Schedule.

## Creating Larger Pieces

Multiple leaves can be tack fused to one another and then shaped.

To tack fuse multiple pieces together, start by protecting the kiln shelf with a good shelf primer (e.g. Hotline Primo™ Primer) or shelf paper (e.g. ThinFire™). Overlap the pieces in a pleasing manner and fire according to the Multiple Leaf Tack Fusing Schedule.

*Medium frit in a complimentary color is used to fill the void between the leaves.*

Once the combined leaves have cooled, place them in a large, kiln-washed slumping form and fire according to the Combined Multiple Leaf Slumping Schedule.

## Casting Schedule*

| Segment | Ramp | Temperature | Hold |
|---|---|---|---|
| 1 | 300ºF/165ºC | 1300-1320ºF/705-715ºC | 45-60 minutes |
| 2 | AFAP | 960ºF/515ºC | 60 minutes |
| 3 | 100ºF/60ºC | 600ºF/315ºC | Off. No venting |

* Schedule for COE 96. For COE 90, increase casting temperature by 15ºF/8ºC. AFAP means "As Fast As Possible", no venting.

## Individual Leaf Slumping Schedule*

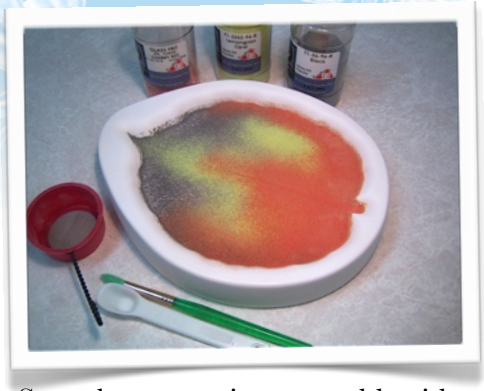
| Segment | Ramp | Temperature | Hold |
|---|---|---|---|
| 1 | 300ºF/165ºC | 1200-1210ºF/650-655ºC | 10 minutes |
| 2 | AFAP | 960ºF/515ºC | 60 minutes |
| 3 | 100ºF/60ºC | 600ºF/315ºC | Off. No venting |

* Schedule for COE 96. For COE 90, increase casting temperature by 15ºF/8ºC. AFAP means "As Fast As Possible", no venting.

When tack fusing or slumping combined leaves, it is important to follow the slow ramps. The larger pieces will have a wide range of thicknesses and can crack if ramp speeds are too rapid.

## Kiwi Leaf Votive

Go beyond the standard plate/platter/bowl project. For example, a beautiful, very "give-able" project is a kiwi leaf votive.



Start by preparing a mold with either MR-97 or Hotline Primo Primer as described above. Again, sift one or two grams of Black powder into the mold to highlight the mold's details. Accent the design by sifting one to two grams of Lemon Grass Opal powder on the bottom and center of the design. Sift one to two grams of Cherry Red powder on the bottom edges of the design. Top the powders with a mixture of 15% (30 grams) fine Tangerine and 85% (170 grams) fine Water Clear. Fire according to the Casting Schedule.

After the piece has cooled, clean the leaf, and place it on a primed Colour de Verre 10" Oval Panel Former. Fire using the Individual Leaf Slumping Schedule.

Use E6000 adhesive (or some similar product) to attach the now curved leaf to a heavy, straight-sided glass.

## Multiple Leaf Tack Fusing Schedule*

| Segment | Ramp | Temperature | Hold |
|---|---|---|---|
| 1 | 200ºF/110ºC † | 300ºF/150ºC | 10 minutes |
| 2 | 200ºF/110ºC † | 1000ºF/535ºC | 30 minutes |
| 3 | 200ºF/110ºC † | 1200ºF/650ºC | 45-60 minutes |
| 4 | 100ºF/60ºC | 1250-1260ºF/675-680ºC | 10 minutes |
| 5 | AFAP | 960ºF/515ºC | 90 minutes (180 minutes for 4 or more leaves) |
| 6 | 50ºF/30ºC | 800ºF/425ºC | 0 minutes |
| 7 | 100ºF/60ºC | 600ºF/315ºC | 0 minutes |
| 8 | 200ºF/110ºC | 100ºF/40ºC | Off. No venting |

## Combined Multiple Leaf Slumping Schedule*

| Segment | Ramp | Temperature | Hold |
|---|---|---|---|
| 1 | 80ºF/45ºC †† | 300ºF/150ºC | 30 minutes |
| 2 | 80ºF/45ºC †† | 1000ºF/535ºC | 85 minutes |
| 3 | 50ºF/30ºC | 1200ºF/650ºC | 5 minutes |
| 4 | AFAP | 960ºF/515ºC | 90 minutes (180 minutes for 4 or more leaves) |
| 5 | 50ºF/30ºC | 800ºF/425ºC | 0 minutes |
| 6 | 100ºF/60ºC | 600ºF/315ºC | 0 minutes |
| 7 | 200ºF/110ºC | 100ºF/40ºC | Off. No venting |

* Schedule for COE 96. For COE 90, increase casting temperature by 15ºF/8ºC. AFAP means "As Fast As Possible", no venting.

† Schedules were developed for side element kilns. Slow ramps by50ºF/30ºC for top element kilns.

†† Slow ramps by30ºF/15ºC for top element kilns and more than three leaves.