# Art Glass Supplies Create Inspire Fuse

# **REUSABLE MOLDS FOR GLASS CASTING**



# Ikebana Vases

Ikebana is the Japanese art of flower arrangement. Simple, but quintessential, ikebana vases can be created with Colour de Verre's Kiwi Leaf, Northwoods Maple Leaf, Rain Forest Leaf, Tropical Leaves, and Lilly Pad designs.

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These vases are created by casting a leaf with a hole in the center. The hole is centered over a small, short glass cup which is then glued to the leaf. A small florist frog is secured inside the cup to support the flowers and leaves.

Any short, glass container with a stable base, and an even edge can be used. However, we discovered the perfect container at Ikea. It is called the "Glimma" design. It is available in two sizes and is designed to hold large and small tea lights. The smaller size - about 1¾ inches wide and ¾ inches tall was perfect for our Tropical Leaves, Rain Forest Leaf, and Lily Pad designs. The larger Glimmameasuring 2¾ wide and 1¼ tallworked great with the Northwoods Maple Leaf and Kiwi Leaf designs.



Even though Ikea does not sell these online, you can often find these on Ebay and alike.

If you are unable to find the Glimma tea light holders, look for 2oz and 4oz chef's prep bowls at kitchen stores. Manufactures include Luminarc and Duralex.

### **Priming the Mold**

Always start by priming Colour de Verre molds. For this project we only recommend using ZYP BN

#### Tools

- $\sqrt{One}$  of the leaf designs mentioned in the introduction
- $\checkmark$ Digital scale
- **√**Sifter
- $\checkmark$  Assorted measuring spoons

Lubricoat Aerosol (formerly MR-97)

# **Spray Duration**

Design	Duration
Tropical Leaves	4 seconds
Lilly Pad	3-4
Rain Forest Leaf	3
Kiwi Leaf	3-4
Northwoods Maple	
Leaf	4-5

Clean the mold with a stiff nylon brush and/or toothbrush to remove any old boron nitride. (This step can be skipped if the mold is brand new.)

Shake the can vigorously until the agitator ball in the canister can be heard rattling. Continue shaking for at least 60 seconds longer. Hold the can and the mold upright approximate 12 inches apart. Apply a light coat in a sweeping pattern across the mold's cavities. Use the Spray Duration table to judge how much ZYP to use on a specific de-sign.

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 of spray, again re-ferring to the Spray Duration ta-ble.

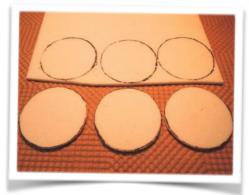
### **Supplies**

- ✓ZYP BN Lubricoat Aerosol (formerly MR-97)
- $\checkmark$  Assorted powder and fine frits
- $\sqrt{\frac{1}{8}}$ " Fiber paper
- ✓ Aleene's Quick Dry Tacky Glue
- $\checkmark$  Small, glass containers



Let the mold dry for ten to fifteen minutes. The mold is ready to fill.

## See our website for more



instructions and videos about priming Colour de Verre molds with ZYP.

### Making the Opening

We have developed a technique that avoids the risky practice of drilling a large hole in a cast leaf. A "plug" is created from three disks cut from  $\frac{1}{8}$ " thick fiber paper.



This plug is used to make a hole in the cast leaf. Note: If  $\frac{1}{8}$ " fiber paper is not available, use a combination of other thickness to get the same results.

Start by measuring the inside diameter of your short, glass container. Then subtract  $\frac{1}{2}$ " (12mm) from the measured diameter. With the help of a template or a com-pass cut three disks using this new measurement.

For example, for our Northwoods Maple Leaf design, we chose to use the large Ikea Glimma tea light cups. The inside measure-ment of the cups is  $2\frac{1}{2}$ ". We cut three disks each measuring 2" in diameter.

Apply Aleene's Quick Dry Tacky Glue to one side of the first disk. (Traditional white glue can be used, but allow enough time for the glue to dry between steps.)

Place the disk, glue side down, in the primed mold. It doesn't have to be placed in the middle of the leaf, but, remember, the leaf will have to balance on the glass con-tainer. reduced fill weights are due to the area in the mold occupied by the fiber paper plug.

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Place a small weight - a short kiln post or florist frog works well - on top of the fiber disk and allow the glue to dry. Once the glue holding the first disk in place has dried, glue and stack the remaining two disks on top of the first disk.

Let the glue dry. Lightly spray the edges of the disks with ZYP to en-sure a minimal amount of casting spurs around the hole. The mold is ready to fill.

### Filling the Leaves

Below are instructions for the each leaf design. Of course, these are suggested colors. More colors sug-gestions can be found in project sheets specific to each design. The





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# Kiwi Leaf

Fill the leaf with a total of 170 grams of frit. Create a mixture of 24 grams of fine Moss Green, 24 grams of fine Light Green, and 122 grams of fine Clear by com-bining the frits in a large lidded container, sealing, and shaking the contents. *Note: It is important to wear a dust mask when working with - and especially mixing - frit.* 

Evenly sift one gram of black frit into the mold. Tap the side of the mold to cause the frit to settle into the detail. Evenly  $\mathbf{fil}$  the mold with the frit mixture.

### **Rain Forest Leaf**

Fill the Rain Forest Leaf design with 120 grams of frit. Mix 60 grams of fine Clear with 60 grams of fine Fern Green/White Dual-Tone. Sift into the mold one gram of Black powder. Using a small spoon, add two to three grams of fine Violet frit into the veining to



add interest to the final casting. Evenly add the Clear/Fern Green mixture into the mold.

# Casting Schedule\*

Casting Schedule					
N. N.	Segment	Ramp	Temperature	Hold	
	1	300°F/165°C	1320°F/715°C	45-60 minutes	
	2	AFAP	960°F/515°C	60 minutes	
	3	100°F/60°C	600°F/315°C	Off. No venting	

\* Schedule for COE 96. For COE 90, increase casting temperature by 20°F/10°C. AFAP means "As Fast As Possible", no venting.

#### **Tropical Leaves**

Start by sifting one to two grams of Black powder into the designs to emphasize the detail of both leaves.



Create a mixture of 26 grams of Adventurine Green powder and 104 grams of fine Clear frit.

Evenly put 50 grams of the mixture into the small leaf and 80 grams in the large leaf.

# Northwoods Maple

Use a fill weight of 230 grams. Use the suggested frit mixtures in the Northwood Maple Leaf project sheet.

Start by sifting a few grams of Black powder into the mold's design. Tap on the sides of the mold to cause the powder to drop into the detail. The Black powder will emphasize the design's detail.

Evenly add the frit mixture to the mold.



## Firing

Before firing, use a soft brush to sweep any frit on top of the fiber paper disk towards the center of the disk so the hole has an even







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and clean edge. Use the Casting Schedule for all the designs.

Leave the top peep hole of your kiln unplugged until the kiln reaches 500°F/260°C so the fumes resulting from the glue and fiber paper burning out can escape.

### Assembly

Once the kiln has cooled, remove the mold and the cast leaf. Wash the glass with warm soap and water to remove any trace of the ZYP. Place the cast leaf, detail side down, on a few layers of paper or cloth towels.

Create a tool by clipping the cotton tip off of a Q-Tip. Use this tool to place four or five dabs of E6000 (or some similar adhesive) to the top rim of the small, glass container. Again, we are using the Glimma design from Ikea.

Turn the glass container over, center it over the hole in the leaf, and press it into place. Let the adhesive cure for 24 hours.

When the adhesive has cured, secure a florists frog into the bottom of the container with florist putty or waterproof adhesive.

