

## Marbling Eggs and other 3D Objects

Please read through the directions before starting.

*These directions will walk you through the process of marbling eggs and other 3 dimensional objects. We had great success with wooden, ceramic and paper mache eggs easily found in A.C. Moore and Michael's craft stores in the early Spring. Always do test samples before working on a large project. For additional information visit our website at [www.prochemicalanddye.com](http://www.prochemicalanddye.com).*

### Supplies

- ✓ Alum M101
- ✓ Methyl Cel M112
- ✓ Clear Household Ammonia \*  
\* See Helpful Information
- ✓ Marbling Colors
- ✓ Marbling Surfactant (optional)
- ✓ Distilled Water (optional)
- ✓ White Distilled Vinegar (optional)

### Equipment

- ✓ a tall and wide container to put your Methyl Cel in and be able to immerse your egg or wood object under the surface without hitting the bottom
- ✓ newspapers (also, newspapers cut in quarter page size.)
- ✓ roll of paper towels
- ✓ small wire cooling racks to dry the objects on
- ✓ stylus, teasing comb or toothpick
- ✓ 1 teaspoon and 1 Tablespoon measures
- ✓ buckets
- ✓ pair of disposable gloves
- ✓ plastic drop cloth or newspapers to cover work space
- ✓ push pins

**Shake paints well, before using.**

### PART 1 Preparation

#### **1. Make the Alum Soak.**

- 4 level Tbl (60 g) Alum
- 2 quarts (2 liters) HOT 120°F (50°C) water

Measure 2 quarts (2 liters) of HOT 120°F (50°C) water into a 1 gallon bucket. Add 4 level Tbl (60 g) of Alum and stir until dissolved. Add your eggs or wooden objects and allow them to soak in this alum solution for 5-10 minutes. There is a natural tendency for the objects to float, so just use a large plastic spoon to keep turning them over and over.

You can use a slotted spoon to remove the eggs and set them on the cooling racks to **dry completely**. *DO NOT RINSE YOUR EGGS or WOOD!*

Discard Alum Soak after 2 to 3 months or if Alum has crystallized around the edges of the soaking bucket. See Helpful information #8 at the end of this direction sheet.

**2. Make the Methyl Cel M112.** Measure 1 gallon (4 liters) of room temperature 75° to 95°F (24° to 35°C) water into a 2 gallon (8 liter) bucket. Slowly stir in 3½ Tbl (25 gm) of Methyl Cel M112 powder. Continue stirring and add 1 tsp (5 ml) of CLEAR household Ammonia.

Keep stirring for 1 to 2 minutes or until the Methyl Cel solution begins to look clear. Then stir intermittently for 30 minutes. Methyl Cel M112 base is ready for Marbling after 30 minutes. For best results let sit 12 hours or overnight. Prepared Methyl Cel M112 can be stored for 3 to 4 months at room temperature without loss of thickness.

If you have very alkaline water, we've found it helpful to add 1 tsp (5 ml) of White Distilled Vinegar to each gallon (4 liters) of prepared Methyl Cel M112. This brings the marbling base back to a neutral pH and seems to help the marbling colors float better.

## **PART 2: Marbling**

**1. Prepare the work space.** Using newspaper or a plastic drop cloth, cover your work area (the table, rinse area and under the wire cooling racks). Position your marbling container near the edge of the table with a garbage can or bag under it to catch excess drips. Fill the marbling container about 2/3 full of prepared Methyl Cel M112. Set up a rinse area with a 1 gallon (1 liter) bucket of room temperature water.

*Before marbling, store prepared Methyl Cel M112 and Marbling Colors in the same room, as they should be the same temperature, ideally between 60° to 80°F (16° to 27°C).*

**2. Prepare your eggs or wooden objects.** On the flatter, bottom side of your object, gently apply a push pin, so that it will stay in place and not fall out. If it does fall out or the hole is too big, wrap small pieces of masking tape around the pin itself to build up a wider diameter and then re-position it.

NOTE: The small ceramic eggs had a small hole in the bottom which allowed us to use our pinky finger in it, in place of a push pin.

**TURNED WOOD BOWLS:** You will need to spread your fingers apart, inside the rim of the bowl and hold the item tightly while marbling it.

**3. Skim the surface** of the Methyl Cel M112 by dragging one of the strips of newspaper across the surface of the Methyl Cel M112 and discard the paper. This evens out the surface tension, clears the bubbles and removes any Marbling Color left over from the previous print. Do not worry about the few bubbles or Marbling Color that will remain along the edges of the marbling container as they will not disrupt the pattern.

**4. Shake the Marbling Colors** well before each use and periodically during the Marbling session. With a push pin poke a very fine hole in the nozzle of the applicator bottle. It is important to test the Marbling Colors before beginning to Marble. To do this, hold the Marbling Color very close to the Methyl Cel surface and place one drop of color on the surface. The Marbling Color should float and spread out into a circle anywhere from one half inch to two inches (1.5 to 5 cm). Repeat this process with each color. Test them together to make sure that they all float when sharing the same surface. If the Marbling Color does not spread as desired see Helpful Information #2 at the end of the directions.

**5. Drop the color.** Once all the colors have been tested, begin Marbling by placing drops of your first color on the Methyl Cel. Place as many drops as desired. Move on to the second color, the third, etc. until the surface is covered. Drops may be placed side by side or on top of the previous color so that concentric circles are made. The more drops of color applied, the deeper the color.

NOTE: You need a deeper and wider container to immerse the eggs and wood objects, to assure that all of the outer surfaces get marbled.

**6. Make the patterns.** This is a personal preference. We found that just the small drops of color on the Methyl Cell created very pretty patterns, without using a stylus, teasing comb or toothpick to create patterns.

**7. Dip the egg or wood object.** Holding the pushpin firmly, immerse the egg into the Methyl Cel, until the complete surface of the egg has picked up the marbling colors. This should be done in a smooth fluid motion, down into and then back out of the Methyl Cel. There will be a natural tendency for the egg to immediately float to the surface. Counteract this by firmly pushing the egg down.

TURNED WOOD: you will also smoothly dip the item down into the Methyl Cel and then back up, holding the inside of bowls with your fingers spread apart.

**8. Rinse the marbled egg or wood object** very gently by dipping it a few times in the 1 gallon bucket filled with room temperature water. This removes the excess Methyl Cel. Do not rub or touch the egg or wood object.

**9. Dry your marbled eggs or wood objects.** Place the rinsed eggs or wood items on the cooling racks to dry. Don't worry about taking out the push pins until the eggs are completely dry.

**10. Clean the surface of the Methyl Cel.** Drag one of the strips of newspaper across the surface of the Methyl Cel M112 and discard the paper, just like you did in Step 2. As you use continue using your Methyl Cel, there will be color under the surface that gradually builds up. This will not alter your color on the marbled eggs. Your eggs or wooden objects only pick up the colors that are floating on the surface.

### **Helpful Information to know**

The marbling components are non-toxic and water based. Methyl Cel M112 base is bio-degradable and is safe to dispose of down the drain or into any septic or city disposal system. All of these products are environmentally safe and user friendly. All Marbling Colors may be intermixed to blend a full rainbow of colors.

\* AMMONIA Use only a clear household ammonia that contains a clear ammonia or ammonium hydroxide solution. Some ingredients that are added to ammonia are alcohols, non-ionic surfactants, perfumes, detergents or color. Any of these ingredients can disrupt the surface tension and will not allow the marbling colors to float. Old

ammonia will not allow the Methyl Cel M112 to set up, resulting in a thickened layer of Methyl Cel M112 forming at the bottom of the solution.

- ✓ Keep work area and tools clean. DO NOT clean equipment with soap, use only water and a stiff brush.
- ✓ If you have hard water try using Distilled water to make the Methyl Cel base. Water impurities can disrupt surface tension so that colors will not float.

### **Sinking Colors**

1. Skim Methyl Cel M112 surface just before laying down drops of color.
2. Marbling Color needs additions of Marbling Surfactant. Add Marbling Surfactant, 3 or 4 drops at a time directly into the actual Marbling Color, and shake. Test again and continue adding the Marbling Surfactant until the color floats and spreads out. Make sure the Methyl Cel M112 is skimmed before each test drop and test between additions of Marbling Surfactant. The more Marbling Surfactant that is added to the Marbling Color, the better it will float and the wider it will spread and consequently the lighter the color. Be careful not to add too much Marbling Surfactant as it can not be removed after it is added. You can also try Synthrapol, dishwashing soap or rubbing alcohol as the surfactant, but use one drop at a time.
3. Methyl Cel M112 is too thick. Thin with tap or distilled water.

### **Fast spreading Colors**

4. Methyl Cel M112 may be too thin. Make another thicker batch of Methyl Cel M112 thicker by mixing 5 Tbl (35 g) Methyl Cel M112 powder per gallon of water.
5. Drop Colorless Extender onto the tray containing the Methyl Cel M112 before adding the Marbling Colors. This will change the surface tension and slow down the Marbling Colors.

### **Grainy Colors**

6. Shake Marbling Colors well before each use. Marbling Colors are tiny particles of colors that settle, so they need to be shaken well before being used.

### **Jagged edged Colors**

7. Skim surface and drop Marbling Colors again.

### **Alum solution has crystals around the edges of the bucket**

8. Heat until Alum crystals re-dissolve or discard and make new solution.

### **Colors wash off in the rinse bucket**

9. Alum soak solution is too weak: colors will not bond well to the surface and will be pale, uneven and or streaked.
10. Alum soak solution is too strong: Colors will adhere to alum and will flake off in the rinse.