(v) the ancient art of floating paints on thickened water and transferring onto paper or fabric.

a visual reference guide for the marbling process



## PROJECT SET-UP

You will need the following supplies:

- Jacquard Marbling Kit (includes: Marbling Color, Carrageenan, Alum, Gall)
- Shallow trays/pans (large/deep enough to marble paper freely)
- · Gallon container with lid
- Whisk or non-food use blender
- Newspaper or paper towels
- Various hair picks, combs, rakes, skewers or stylus (for "combing" patterns)
- Fabric or sheets of paper\*



#### 2. PREPARING MORDANT

Be sure to stir the solution well to ensure the Alum has completely dissolved.

\* Papers that work well for marbling are absorbent and contain little to no sizing. Rice papers, printmaking papers, blotter paper, drawing paper, charcoal paper and pastel paper work particularly well. Watercolor paper is not recommended. Experiment with different types of paper. Some types will not work at all - color will not adhere properly and may run off of the page.



### I. PREPARING MORDANT

A mordant must be used so that the marbled design will adhere to the fiber quickly and permanently.

- For paper: dissolve 2 tsp/10 g of Alum in 1 qt/0.95 L warm water.
- For fabric: dissolve 2 tsp/10g of Alum in 1 gal/3.79 L warm water.

Treated papers should be used within 2 days to ensure the mordant is still effective. Alum-treated fabric or paper can oxidize if exposed to air for too long. Preserve treated paper or fabric by storing in an airtight bag or container.



3. PREPARING MORDANT

Pour prepared Alum solution into a shallow tray/pan.

Note: the tray/pan you are using should be large/deep enough to submerge the paper or fabric fully.

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## 4. PRE-TREATING THE PAPER

Submerge each sheet of paper or piece of fabric one at a time into the alum solution. Leave in the solution for 20-30 minutes, then line dry.

Note: if you plan to use the same tray for marbling, be sure to wash the tray thoroughly, as residual Alum will contaminate the Carrageenan solution, preventing proper adhesion of the marbled design to the paper or fabric.



#### **6.ABOUT CARRAGEENAN**

Carrageenan may be used immediately, but reaches optimum consistency after 12 hours. If hand mixing with a whisk, make sure there are no clumps. You can also use a 1 gallon lidded container and shake the mixture to blend. Carrageenan solution will only keep for a few days at room temperature. If it gets moldy, smells bad or becomes thin, discard. Refrigeration will extend the solution life to a month or more.



## 5. PREPARING THE MARBLING BASE

Carrageenan is a natural seaweed derivative used to thicken water to create the marbling base or "size."

For base: slowly add 4 tsp/19g of Carrageenan per 1 gal/3.79 L of warm water. Blend for about 10 minutes (or until all Carrageenan is dispersed).

Note: thicker size works best for stone or marbled patterns, while thinner size works best for combed designs. Size can be adjusted with water.



#### 7. PREPARING THE MARBLING BASE

After the marbling base solution is ready, pour into clean tray/pan. Before applying paint, clean the "size" of any air bubbles and dust by laying newspaper or a paper towel on the surface and dragging it towards you. Skimming prior to adding paint is very important, as it removes any "skin" that prevents the paint from spreading evenly.

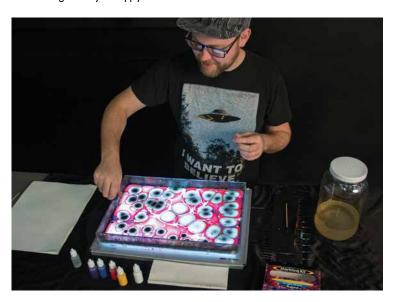
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#### 8. USING MARBLING COLOR

Begin by gently dropping the paint, one drop at a time, close to the surface of the marbling base. It is recommended to start with black, as it spreads the most. Eye droppers, squeeze bottles or a paint brush, straw brush or stylus dipped in paint and flicked are great ways to apply color.





# COLOR PLACEMENT

As you apply colors, you will see a concentrated dot in the middle of each expanding ring of color. If you wait for this concentrated dot to spread evenly before applying the next color, you will get better adhesion and better color separation. Colors can be placed randomly or in patterns. Concentric circles are made by adding drops of different colors to the centers of previous circles.

#### **COLOR TIPS**

Each color should spread to the same extent (with the exception of black, which spreads the most and is traditionally applied first to give the rest of the colors definition and provide good contrast). The last color applied is typically the most dominant color in the final design. Experiment with how much paint is applied to the surface for different effects. Large amounts of paint dripped directly from the bottle will result in very bright, vibrant color. When paint is flicked in tiny drops from a straw brush, the color result will be lighter or more pastel. Note: if too much paint is on the surface of the size, the paint can run, even on paper treated with mordant.

# USING SYNTHETIC GALL

Adding Gall makes the paint float better and spread more on the size, and can be used to make one color dominate over another, add clear voids or gaps to your design, or create your own marbling colors from standard acrylic paints.

Using Gall in a marbled design: in a secondary jar or palette, add 1-2 drops of Gall to 1 tsp/5 ml of water (adjusting concentration to preference). Flick diluted gall from a toothbrush to achieve a honeycomb-like effect called "Italian vein." Do not add Gall directly to the surface of the size or to bottles of paint – Gall is very powerful, and once added, it cannot be undone.



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#### 9. MARBLING PATTERNS / TECHNIQUES

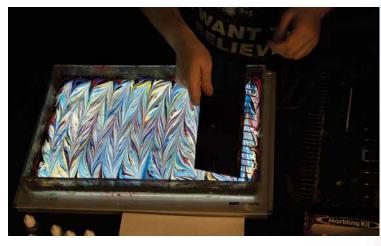
Typically, marbled designs are created by combing the colors floating on the size. Combinations of combing patterns and techniques result in more intricate designs. In this example, after dropping several colors, a Get-gel pattern was used, dragging a stylus through the colors in first a horizontal, then a vertical, back-and-forth pattern.

To learn how to create other traditional patterns, visit our Marbling Video Channel at: vimeo.com/album/3437883.



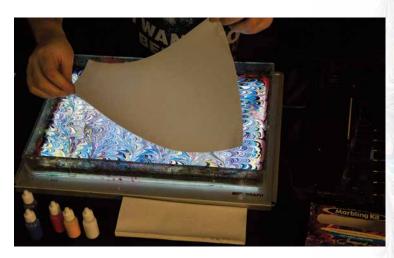
Closeup of the marbled design in progress.

A stylus was swirled across the Get-gel/Rake Nonpareil patterns to complete the design.



#### MARBLING PATTERNS / TECHNIQUES

For variance in technique, try varying the widths of the teeth in the combs or rakes used, use wavy pull patterns (instead of straight lines), and combine multiple patterns. In this example, a Rake Nonpareil pattern is pulled horizontally across a Get-gel pattern.



#### 10. PICKING UPTHE COLOR

Hold a sheet of treated paper on opposite corners with a slight upward curve. To prevent air from getting trapped and causing holes in the design, carefully lay the paper down on the surface of the design with the middle of the sheet touching first, then gently let go of the sides so that the paper lays flat on the size surface.

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## II. COMPLETING THE PRINT

Carefully lift the paper or fabric off the size from one edge after a few seconds (do not leave longer, as it will contaminate the base and cause paint adhesion problems with subsequent prints). Place the print paint side up on a flat board, or hang to allow print to air dry completely. Once dry, rinse the design by running a small stream of water from a faucet onto the paper and running your finger lightly over the print until it no longer feels slippery.

Note: skimming the surface of the size after marbling removes residual paint. This does not always need to be done if you wish to have colors from the last design incorporated into your new design.

#### TIPS & TROUBLESHOOTING

Make sure paints, chemical and size are all at room temperature, as differences will affect results.

Marbling will not adhere to a wet surface - be sure paper is dry before marbling.

Problems with paint adhesion are often due to an alum issue. Too much alum will cause the paint to bind to the alum instead of the paper fibers and cause the paint to run.

When dropping paint on size, release drops close to the surface. A drop applied from a greater distance will have more force to break the surface tension and cause the paint to sink.

When marbling, working quickly is best – it's best not to work on a pattern much longer than 4 minutes (longer times will result in tiny micro cracks in the design).

## For more tips & troubleshooting:

Visit our website at: www.jacquardproducts.com.

