



How to Make Handmade Watercolor Paint from Rock or Clay | DIY

by

[Mad Rox](#)

in [Handmade Paint-Making](#), [Nature](#)

Today we're making watercolor paint from foraged rocks. Soft rocks like sandstones and shale work better than hard ones.

This is a very basic way to make paint. It can get a lot more complicated, but the more advanced techniques are definitely not necessary while you're trying to learn how to get started. A freshly ground rock will make a coarse paint. Washing (levigating) makes a smooth paint.

If you fall in love with using your local colors, look into how to levigate (wash) pigments, create lake pigments from plant parts (precipitating chemical reactions), and separate the lights and heavies. This is all a lifetime learning process. Experiment and see what you learn in the process!

Before You Start

You'll need a few things to make handmade watercolor paint. Some, like the muller and pans, are optional. But the gum Arabic is essential unless you've harvested gum from cherry, peach, or plum trees. Other paint makers have used these alternatives, but I haven't found them to be satisfactory in texture, and I haven't tested them for durability or longevity.

SAFETY

Wear eye protection when smashing rocks. Wear respiratory protection when working with powdered pigment or smashing/grinding rocks and clay. Clay and sandstone contain silica, which can cause serious respiratory issues if you inhale the dust. If you have sensitive hearing, you may want to use ear plugs during mulling or hammering.

The rocks I've brought with me today for this workshop aren't toxic – but most of them DO contain silica (sand is made from silica). There are many natural pigments (especially metal ores) that are INCREDIBLY POISONOUS and grinding them into dust can release them into the air to be breathed in. So make sure you know what you're making your paint from is safe, and take the proper precautions! **A k95 dust mask is good enough for silica, but it is NOT good enough for toxic dust.**

Supplies

Media

- Most critical is the media. I use raw gum Arabic, honey, and boiled water. It took a little bit of experimenting to get a good ratio for the mix, but I settled on a formula that seems to work.

Muller

- Maybe you'll want a muller_ (glass tool used on a plate to mix pigment with media), but when I first started making the paints, I didn't have one. I used the alternative technique offered below that I use when the pigment won't crush enough to get a smooth paste when mulling. I use a tempered glass chopping board for the plate.
- If you don't have a muller or think you will need to strain your paint, grab an old pair of panty hose so you can cut off segments of it to use for filtering.

Pans

- Something to put your finished handmade paint in. Artists of antiquity used whatever little dish might have been handy. Seashells were commonly used. I buy pans and half-pans from Amazon. I've also made my own from polymer clay in a pinch. Tiny sample sized jars are nice, too.
- Something to store the paint pans in. I use small mint tins with hinged lids. I also get those from Amazon. You can use anything you want to stay organized.
- If you don't want your pans sliding around inside your tins, if you use the tins, get some tiny little magnets to put inside the pans, or magnet strips in the bottom of your tins before you add the paint. I've tried adding magnet strips to the bottom of the pan, but they inevitably come off. It is working well to put a sticky back magnet strip into the container and then use metal pans. They stay in place.

Utensils

- Disposable plastic pipetters for filling pans or adding media
- Palette knives. I use plastic so the magnets don't hop out of the pans onto them.

Let's go make some handmade watercolor paint.



“Rocks, clay, and soil hold the soul of the Earth.” ~
Madison Woods

The Steps

Gather the material

Most rocks, slate, shale, and clay can be used to make paint and some of the colors are very nice. We have a lot of different sandstone colors here, so that's where the bulk of my colors come from. Some rocks are too hard to crush without mechanical help, so I stick to the things I can break down easily enough to avoid wrist pain, and use my rock crusher if I'm making a larger volume or cracking harder rocks.

Clean

Sometimes rocks are dirty. They lie around on the ground and in the creek or in the mud. So that's to be expected. So I clean them before I use them by scrubbing them down with a brush.

Dry

Let the rocks dry thoroughly before you start breaking them. Or don't. It won't matter if they're wet, and actually the moisture helps keep the dust down.

Crack

Larger rocks need to be broken outside. This will spare your counter-tops and chopping blocks. I know this from experience. You can even put the rock on top of a larger rock, and use a smaller, hand-held rock to break the smaller rocks into smaller pieces. Very low-tech!

Break

Break the rocks into small chunks so that you can hold several in the palm of your hand. Bring those inside to your mortar and pestle. Making handmade watercolor paint involves a lot of using your hands!



Get a heavy-duty stainless mortar and pestle. This one has dimples on the pestle and the inner surface is brushed. Works great!

While I use stainless for most of my grinding, if you are working with light colored rocks, like limestone, it could leave a grayish cast to your pigment. For those, I have a small porcelain mortar and pestle to use. I'm not sure whether it's the pH of the rock causing the issue, or not. I don't notice this problem with the other colors.

Grind to smaller pieces

- Do one small chunk at a time, then add the powder to a jar

When you're making handmade watercolor paints from rocks, clay, or anything, you'll get the finest powder you can. Some people sieve out the lumps before making the actual paint. If you like the texture and character of the little bits, you can leave them in there too. It's your choice.

Optional: Make a finer powder

To make a smooth paint, put all of the powder you've crushed into a quart jar. Add water, cap and shake it.

Pour the colored water into another jar, but leave the sand and sludge behind. Add more water to the original jar, shake and pour into another jar. When the color starts looking thin, just pour it off of the sludge and let the sludge dry.

Let the colored waters in the other jars settle. Once the water has cleared, carefully pour the water off and leave the sediment behind. Once this sediment dries, it will make a very fine paint.

Make the Paint



Mulling Handmade Watercolor Paint

- Put a little pile of powder on the mulling board.
- Make a little well in the center
- Fill the well with media (watercolor media is made from gum arabic)
- Let the liquid soak into surrounding pile a bit before mixing with palette knife
- Use a muller to get the powder suspended and stable in the media
- put in pans

How to Mull

When you put the pile of pigment on the board, wet it good with your media but not so much that it will run off of the board. Mix it a bit with your palette knife. Take the glass muller and use it to spread the pigment all around in a circle. It'll sound gritty. This can be very noisy, so use earplugs if it's uncomfortable for your ears.



Once you've started spreading your pigment paste, if it's too sticky, add a few drops (of media) with your plastic pipette. When you get it spread out, then scrape it off the muller and scrape the glass so that you've reconstructed your little pile in the middle. Do it again. Repeat until the paste begins to feel like butter. That is when it is done.

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Pan the Paint

Use your palette knife to transfer the paint from the mulling plate to a pan. You can use natural things like acorns, stones with indentations, etc. You can also put the paint into small jars. Make the paint slightly thinner so that it can pour. Then put it into your pans in layers, letting each layer dry and shrink before adding the next. You can also pour them into silicone tiny ice cube trays to get small cubes. Attach the cubes to interesting things for a custom palette.

That's it!

I hope you try your own hand at making some handmade watercolor paint from the resources surrounding you. I collect rocks, clay and soil from everywhere I go now. Eventually there will be a palette to represent the 'soul' of all of my favorite places.