

HANDCRAFTED  
EST  
1949  
BROOKLYN·NY

**Utrecht**  
ASK THE EXPERTS

## Studio Craft: Working with Dry Pigments



**Ask the Experts: “I purchased some dry pigments and need some advice on how to use them. What do I need in order to handle them safely? Is there a difference in how they should be used for making different kinds of paint?”**

**A:** Generally speaking, dry pigment powders can be used safely by adult artists willing to observe simple precautions. While not all pigments are toxic, a particle filter mask and nitrile gloves are always recommended when handling loose powders to prevent inhaling airborne particles or absorbing through the skin. When making paint, wear respiratory protection until all pigment is thoroughly wet and no free particles remain. Clean up completely after each batch so no pigment residue remains to stain subsequent batches.

Unlike oil paint which can be made in large batches, egg tempera is made by combining small amounts of pigment and binder directly on the palette. Aside from the impracticality of handling loose powders during the painting process, some powders don't combine readily

with water-based vehicles and need to be prepared before combining them with the binder. By adding wetting agents, dry pigment can be converted to a concentrated paste which can then be stored in tightly capped jars and combined with the binder as needed



Pigment moistened with denatured alcohol

Distilled water and alcohol are both good wetting agents for pigments that will be used with water-based binders. While water alone works for some colors, alcohol helps wet pigments that are difficult to mix with water. Hardware store denatured ethanol or high-proof vodka will work for this purpose.

If pigment paste will be stored for a long time, it may be necessary to add extra ingredients to prevent spoilage. Residual alcohol from wetting will act as an antimicrobial for a while, but it will evaporate when the container is open. For long-term storage, spray a small amount of Lysol disinfectant over the pigment surface before capping colors.



Pigment paste, ready to use or store

Whether or not pigment paste needs to be worked with a glass muller depends on the intended binder. Modern, manufactured pigments are processed to a very fine particle size, so a fairly consistent mixture can be achieved easily with just a palette knife. A simple mixture is perfectly fine for egg tempera. When making handmade acrylics, however, best results are achieved by using a glass muller to thoroughly disperse the pigment paste.

When the pigment paste is ready, combine with the acrylic binder using a palette knife. (Acrylic paint dries quickly, so working finished paint with the muller is not recommended.) For a binder, select a low viscosity, strong polymer dispersion like Utrecht Acrylic Sizing.

When making handmade acrylic colors, it's generally better to strive for a softer bodied paint which is less likely to be under-bound. Stiffer body can be achieved by adding a wet paste of marble dust, but if too much is added, the resulting paint might not have enough binding power.

If you have added additional stiffeners and would like to test the strength and flexibility of finished paint, spread a sample on a sheet of mylar. When the sample has dried completely, flex the plastic film and observe for cracking and peeling. Acrylic paint that cracks easily may not have enough binder to produce a durable film.

Intended for reference only. Observe all package instructions. Dick Blick Holdings/Utrecht Art Supplies is not responsible for any damage to personal property that may result from use of the information presented herein. ©Copyright 2021 Dick Blick Holdings Inc. All rights reserved.