

## TRANSCRIPT

# *Safety in the Dye Studio*

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Welcome back. We are talking about Dye Safety in this session and this video is SO important. This should be mandatory viewing for everyone who is considering doing any dyeing whatsoever.

Your health and safety and the health and safety of your family is more important to me and should be more important than any beautiful color you might like to dye or create.

### **Fine Dye Powders and Inhalation**

Safety in the dye studio is essential to your health. The dyes and chemicals used by home dyers are generally non-toxic but must still be handled with care. The handling of loose dye powder is the most hazardous aspect of dyeing since the inhalation of dye chemicals can result in respiratory irritation and sensitization. In other words, you can develop what feels like an allergic response to dyes which manifests itself with asthma-like symptoms: shortness of breath, wheezing, and difficulty taking a full and complete breath. This reaction can worsen with repeated exposure until you get to the point where you may not be able to work with the dyes at all. So reduce the risk of inhalation by wearing a NIOSH-approved respirator or mask approved for use with powders and dust. NIOSH is the National Institute for Occupational Safety and Health in the US and it's a federal agency that is responsible for making recommendations for the prevention of work-related injury and illness. Even though you might not be wanting to become a production dyer and do this every day, 8 hours a day, it's still important to protect yourself as well as you can.

I aim to use respiratory protection that is at least N95 certified meaning that 95% percent of solid particles are filtered out. Make sure your mask makes a good seal around your nose and your face. I've worn the disposable-type masks before and still found dye powder on my nose after dyeing. So that's why I go with these respirators. If all you have is a disposable mask, it's better than nothing, but ideally get yourself a good respirator if you're thinking about doing more dyeing.

This can help ensure a long relationship with the craft of hand-dyeing.

Dye powder is available to us as very fine dust which is easily spread. It's difficult for the eye to see, but when you are working with dye powder, it can end up flying everywhere. Lay a damp paper towel under your dye mixing area to see just how much and how far the dye travels. You'll be amazed. It goes everywhere. To prevent the migration of dye powder, keep open containers of dye powder away from drafty areas. Always wipe up spills since they become powder again once dry.

## Protect Yourself

Wear rubber gloves and an apron to protect your skin from direct contact with the dye solutions or auxiliary chemicals and so that you don't absorb anything through your skin. My greatest pet peeve is seeing dyers with dye-stained fingers and hands. So much is absorbed through our skin, it only makes sense to minimize exposure as much as possible! Wear an apron or protective clothing that you can leave in the dye area so that you don't transport stray dye.

When you are mixing or working with dyes, you might consider wearing safety glasses. I can absolutely say that I have been hit in the eye with a big splash of turquoise dye solution, so I just think, anything can happen.

Anything that you use for dyeing should not be used again for cooking. That includes any kitchen pots, cooking utensils, wooden spoons, measuring cups and spoons, stock pots, crock pots, and turkey roasters, etc. If you are concerned about investing in a whole set of fancy pots and pans when you are just experimenting with dyeing, pick up inexpensive, used equipment from the local thrift store to use for your dyeing projects and save your pretty kitchen stuff for cooking! Use only dedicated pots and utensils for dyeing. Some people like to dye with their microwave ovens or conventional ovens -- again, these should be reserved for dyeing only. Please Do not use your home kitchen for dyeing.

And finally, never eat or drink in the dye area. Just like you wouldn't be using bathroom cleaner simultaneously while eating lunch, keep your food and drink away from your dye area!

## Protect Others

It's also important that if you are working with dyes at home with your family, you might have other safety considerations. Perhaps you have small children or pets and so you'll need to take the same precautions you would for storing cleaning chemicals. Consider putting your dyes and auxiliary chemicals high up and out of reach of children. Or put it under lock and key. These dyes are considered non-toxic when you use them as directed, but kids and animals can't know what those instructions are, so you need to be sure there is no chance of anyone ingesting any of the dyes or chemicals.

Also remember to turn off your cooking/heating elements so that you don't accidentally start a fire and burn your house down. I have to confess that one morning, I was up early and working away in my attic on a quilt and I was ironing or pressing the quilt blocks. Then when one of my babies woke up, I immediately jumped up and went downstairs to help them. And I completely forgot to shut off the iron. And it didn't even cross my mind for even a second all day, as I went out and took the kids out to school, went to the studio to work, and then came home, put them to bed and then thought. Hmm, I wonder if I shut off the iron. And I went up the attic to check AND I did not.

That iron was on for 14 hours straight. It could have been an absolute disaster. I could have burned my house down. It's also happened at our own production dye studio a few times where either me or one of the other dyers has simply forgotten to turn off the oven or turn off a burner. It totally happens. Everybody has stuff on their minds. So I was paranoid about the iron, so I got myself an auto shut off iron so that I could prevent a disaster. And at the studio, we have a habit where the last person out the door still goes back and double-checks all the ovens and stoves. It's so important, so be safe.

## **Disposal**

Never pour excess dye stock solution down the drain. The reason why I love working with acid dyes is that once the chemical reaction happens between the dye and the fibre, all the dye should be completely bonded to the fibre and nothing else is left in the dye bath. This is why it is generally considered to be a low-impact dye process. The exhausted dye bath should be clear, plain water that can simply be poured down the drain. If anything, the water might be slightly acidic and if you want to bring it to a neutral pH you could add a touch of baking soda. But in my experience this is not usually necessary.

If there is any excess dye that is leftover from the dye process, I keep a stash of ugly yarn that needs to be overdyed or some handfuls of extra wool fibre that I can throw into a pot with the excess dye to bind it and exhaust it all. We never pour excess dye stock solution down the drain.

So, we love colour, but safety first. Please keep these points in mind as you are collecting all your supplies and equipment and figuring out where to set up your dye space.

Also, all the chemicals and dyes that we use have their safety information detailed in what are called MSDS -- material safety data sheets. These sheets describe each chemical, the potential health hazards, and information about disposal or treatment for exposure. It's my recommendation that you download and read through this safety information for any of the chemicals that you plan to work with.

Let me know if you have any safety concerns that I haven't mentioned here. You can post your question in the Discussion panel of the course and I'll do my best to answer any concerns you might have.