

## **Intro to Powder Coating**

### ***Spray + Sift + Dip***

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#### **LIST OF BASIC TOOLS NEEDED:**

See table below for where to get tools/ other options...

1. Toaster oven with an oven thermometer or kiln with thermometer (400°)
2. Sifters (80-100 mesh recommended)
3. High temp Silicone “plugs” and or mat/molds
4. Cross locking Tweezers
5. Drill bits for making holes to hang samples
6. Leather gloves/ oven mit/glove
7. Dust Mask or preferably a respirator that protects you from particulates and fume
8. Ventilation... or if you don't have good overhead ventilation (like me) use a spray shelter and work outside
9. Paper (or cardboard scraps) to sift on to catch any over sift
10. Canned air or an air compressor to clean out sifters (not needed, but very helpful for cleaning, you could also use a shop vacuum for cleaning off your sifters)
11. “blue tape” or other high temp tapes for masking (optional)
12. Heat Gun
13. Brass sheet for making samples (or you can use copper, steel, or aluminum if that's what you prefer working with)
14. saw frame or metal sheer (for cutting your sheet into 2” sample squares...)
15. Sandpaper
16. Sterling silver Earring posts or wire or scatter pins, and solder (for making a finished powder coated piece if you would like, or cord/chain to put a finished pendant on.)
17. Silicone Rubber ear-post sleeves for covering ear posts or scatter pins from getting powder coated
18. SHARPIES or other permanent markers
19. Graphite pencils
20. Most important: Powder Coat in Desired Colors

<b>Quantity</b>	<b>Item/Tool/ Material</b>	<b>Supplier/ Website/ &amp; Item Number</b>
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1	<b>*Toaster Oven*</b>	<p>Any toaster oven that goes up to 400° (its helpful to find an oven that has a timer or option to “hold” temp)</p> <p>I also recommend medium – large size oven for more workspace, but small ovens will do just fine if that’s what you’ve got to start with... after some time of working with powder coating both traditionally, and alternatively like the sifting and dipping we will also be doing in this class, I bought myself:</p> <p><a href="#">Oster French Door Convection Toaster Oven</a></p> <p><b><i>But you can use any oven – as long as it heats up to 400°</i></b></p> <p>(if you don’t want to buy one brand new, you can sometimes find decent ones from places like goodwill...) Feel free to email me with questions, <a href="mailto:brie@briefflora.com">brie@briefflora.com</a></p> <p>** once you use a toaster oven for powder coating you can NOT use it for food ever again.</p>
1	<b>Powder Coating Gun</b>	<p>I recommend getting one of the started Kits from Eastwood. I personally use the Dual Voltage. What the starter kits also come with some other helpful and necessary tools:</p> <ul style="list-style-type: none"> <li>• 1/2” High Temperature Fiberglass Masking Tape</li> <li>• (30) High Temp Silicone Plugs Assortment</li> <li>• 1 lb spool Safety Wire .041”</li> <li>• 8 ounces High Gloss Jet Black Powder</li> <li>• (3) 8 ounce plastic bottles &amp; lids</li> <li>• <b>Disposable In Line Air Filter***** (this is a must have)</b></li> </ul>

		<p><b>EASTWOOD ORIGINAL DIY POWDER COATING GUN STARTER KIT:</b>  <a href="https://www.eastwood.com/eastwood-original-diy-powder-coating-gun-starter-kit.html">https://www.eastwood.com/eastwood-original-diy-powder-coating-gun-starter-kit.html</a></p> <p><b>EASTWOOD DUAL VOLTAGE POWDER COATING GUN STARTER KIT:</b>  <a href="https://www.eastwood.com/eastwood-dual-voltage-powder-gun-starter-kit.html">https://www.eastwood.com/eastwood-dual-voltage-powder-gun-starter-kit.html</a></p>
1	<b>Air Compressor</b>	<p>I use a <b>CRAFTSMAN 6-Gallon Single Stage Portable Electric Pancake Air Compressor:</b>  <a href="https://www.lowes.com/pd/CRAFTSMAN-6-Gallon-Single-Stage-Portable-Electric-Pancake-Air-Compressor/1000595167">https://www.lowes.com/pd/CRAFTSMAN-6-Gallon-Single-Stage-Portable-Electric-Pancake-Air-Compressor/1000595167</a></p>
1	<b>1 or 2 Extension cords</b>	Long enough to get you to your work space – I powdercoat outside my studio in my driveway
1	<b>Compressor Hose</b>	Various options: up to you / what fits your compressor
1	<b>Blow Gun Kit (for cleaning/blowing off powder from gun and tools)</b>	<a href="https://www.lowes.com/pd/Kobalt-7-Piece-Blow-Gun-Kit/3421414">https://www.lowes.com/pd/Kobalt-7-Piece-Blow-Gun-Kit/3421414</a>
1	<b>*Oven Thermometer*</b>	<p><a href="https://www.walmart.com/ip/Mainstays-Oven-Thermometer/37649934">https://www.walmart.com/ip/Mainstays-Oven-Thermometer/37649934</a></p> <p>Having an oven thermometer is very important, sometimes toaster ovens will get hotter or cooler than the temp it is set at, this helps you make sure that your oven is at the right temp while working! (I have two in the back of my oven! But you only need one)</p>
1	<b>(Optional) HOMERIGHT SMALL PAINT SPRAY SHELTER</b>	<a href="https://www.eastwood.com/homeright-small-paint-spray-shelter.html">https://www.eastwood.com/homeright-small-paint-spray-shelter.html</a>

		<p>I use this to spray in outside. You may make your own booth out of cardboard or a plastic container. <b>I recommend the spray shelter, easy to clean up and store away.</b></p> <p>I do not teach you how to set up a vacuum booth because the powder coming out of the spray gun is *charged* and if there was a small spark in your shop vac, it could explode. If you do not have proper ventilation in your studio, please set up your powder coating booth outside. I spray powder outside and will show you how I set up and break down.</p>
1	Respirator (if you cant get a respirator you must at least be wearing a heavy duty dusk mask!!!)	<p>Options  <a href="https://www.eastwood.com/gerson-half-mask-face-respirator-med-9200m.html">https://www.eastwood.com/gerson-half-mask-face-respirator-med-9200m.html</a>  <a href="https://www.fullsource.com/north-safety-550030/?size=3">https://www.fullsource.com/north-safety-550030/?size=3</a></p> <p>and you need to get the filters... I use  <a href="https://www.fullsource.com/north-safety-7581p100l/">https://www.fullsource.com/north-safety-7581p100l/</a></p>
1	Folding table or work surface	If you are going to be breaking down and setting up outside, I recommend a folding table!
1 pack	<b>XXLARGE 3/4"-2" HIGH TEMP SILICONE RUBBER STOPPER PLUGS KIT</b>  Or <b>20PC XL HIGH TEMP SILICONE RUBBER TAPERED STOPPER PLUG KIT</b>	<a href="#">High Temp Masking Supply</a>  Item # <a href="#">HTMS-35PPK</a>  Item # <a href="#">HTMS-20PPK</a>
1	Stainless Steel Round Wire, 1-Lb. Spool, 20-Ga., Dead-Soft	Rio Grande – <a href="http://www.riogrande.com">www.riogrande.com</a>  Item #: 108002

	<p>Or</p> <p>Steel Ornament Hanging Hooks</p> <p>Or</p> <p>Safety Lockwire</p>	<p>You can find these at most hardware stores or:  <a href="#">ALAZCO Value Set 600pc Silver Ornament Hanging Hooks</a></p> <p><a href="https://www.amazon.com/Wire-Cable-Specialties-MC0410-1-MS20995C41/dp/B005BS3V3O">https://www.amazon.com/Wire-Cable-Specialties-MC0410-1-MS20995C41/dp/B005BS3V3O</a></p>
1	Small Oven trays that fit into your microwave	<p><b>Size will depend on your oven</b>  I got mine cheap from Walmart: <a href="#">non-stick baking sheet</a>  <i>Having this nonstick is nice because after a while if layers of powder bake on your sheet for any reason, it can be easily removed / scraped off...</i></p>
1 or 2	Oven Mit/glove	<b>For pulling out your tray</b>
2-4	Cross- Lock Tweezers	<p>Rio Grande – <a href="http://www.riogrande.com">www.riogrande.com</a></p> <p><a href="#">Pack of 4 - Item #: 115584</a></p> <p>For grabbing work out of the oven that might be hanging</p>
3-5	“Enamel” sifters (for different colors)	<p>Size is up to you (depends on your work and the surface area, its nice to have at least one of each size...)  <a href="https://thompsonenamel.com">https://thompsonenamel.com</a></p> <p><b><u>Thompson Enamel</u></b>  Small (1/2” diameter x 1/2” d.)  Medium (1 1/4” diameter x 7/8” d.)  Large (2” diameter x 7/8” d.)</p>
2-3 sheets	Brass Sheet	<p>I recommend getting 22 gauge for making various 2” sample squares, and also having enough to saw and or stamp out a final piece to create...<a href="#">Item #: 130122</a>  Rio Grande – <a href="http://www.riogrande.com">www.riogrande.com</a></p>

<p>If you want to create earrings or a pin....</p>	<p>We will be learning how to dip some pieces into powder coat as well as sift. If you would like to dip little stud earrings or pins I recommend getting some of these...</p>	<p>Rio Grande – <a href="http://www.riogrande.com">www.riogrande.com</a></p> <p>Nickel Alloy 5/16" Scatter Pin  <b>Item: 631212</b>  +  Base Metal Nickel-Plated Scatter Pin Clutch  <b>Item: 661228</b></p> <p>and/or</p> <p>Sterling Silver .030" x 3/8" Heat-Treatable Ear Post  <b>Item: 682788</b></p> <p>Translucent Knurled Firm Rubber 3mm Hypoallergenic Ear Wire Guard  <b>Item: 638268</b></p> <p>Or  Sterling Silver Heavyweight Friction Ear Nuts  <b>Item #: 690517</b></p> <p>(these are just my suggestions, you can get a different kind of scatter pin/ earring posts...)</p>
<p>1 pack</p>	<p>Silicone Rubber Ear Post Sleeve</p> <p>For covering earring wire/pin posts while powder coating</p>	<p><a href="https://www.riogrande.com/product/silicone-rubber-ear-post-sleeve-white/335061">https://www.riogrande.com/product/silicone-rubber-ear-post-sleeve-white/335061</a></p>
<p>Various sizes and colors up to you!</p>	<p>SHARPIES or any kind of permanent marker/ink</p>	<p>(I mostly use fine tipped sharpies) Get various colors to try out, we will be using them to draw on top of the powder coat... *note most colors except black will slightly change once baked in the oven...</p>

		<p>Where to buy: Target, Walmart, Amazon, officemax, staples, michaels, CVS, dollar general....</p>
Graphite pencils	Any kind should work fine...	<p>I work with bic mechanical pencils. Where to buy: Target, Walmart, Amazon, officemax, staples, michaels, CVS, dollar general....</p>
At least 3-5 different colors....	Powder	<p>You can buy individual powders of your choice. I primarily get most of my powders from <a href="#">Powder Buy The Pound</a>. You can also get various colors from <a href="#">Eastwood</a>, and they offer a few Sample Kits:</p> <p><a href="#">POWDER SPECIALTY COLOR SAMPLE KIT</a></p> <p><a href="#">POWDER STANDARD COLOR SAMPLE KIT</a></p> <p><a href="#">POWDER METALLIC 6 COLOR SAMPLE KIT</a></p>
1	Heat Gun	<p><a href="#">WARRIOR 1500 Watt Dual Temperature Heat Gun \$8.99</a></p> <p>OR</p> <p><a href="#">ROCKWOOD 1500W HEAT GUN \$20.99</a></p> <p>OR</p> <p><a href="#">HEAVY DUTY HEAT GUN ATD TOOLS 3737 \$98.99</a> (FOR LONG TERM USE, NOT NESSESARY FOR THIS WORKSHOP, BUT NOT A BAD INVESTMENT... HAS A HANDS FREE STAND FOR VERSATILITU)</p>

1 pack of at least 10	For dipping / mixing powder  Plastic cups w/ lids	<p><a href="#">5.5 oz. Plastic Disposable Portion Cups With Lids - Souffle Cups</a> Comfypackage.com</p> <p>This comes as a 100 count; you can find similar cups w/ lids other places as well. I reuse mine over and over. You can also use glass jars with lids if you would like to avoid plastic!</p>
Whatever you've got or at least 1 pack of a course or medium grit	Sand Paper	<p>I use various nail files + grits from my local Sally Beauty supplies store:  <a href="http://www.sallybeauty.com">www.sallybeauty.com</a>  <a href="#">Cushion Nail Files</a>  <a href="#">4-Way Nail Buffers</a></p> <p>**if you have access to a sand blaster, that is a great way to prep your metal before powder coating</p>
1 pack	Drill Bits and center punch	<p>Rio Grande:  <a href="#">Drill bits Item # 349413</a>  <a href="#">Center punch</a></p>
<b>Optional:</b>	High temp tape	<p><a href="#">High Temp Masking Supply</a>  You can check out all sizes of tape including round tape "stickers" that you can use to block parts of your piece that you don't want to powder coat.  <a href="https://www.eastwood.com/hotcoat-high-temp-fiberglass-masking-tape.html">https://www.eastwood.com/hotcoat-high-temp-fiberglass-masking-tape.html</a></p> <p><a href="#">HIGH TEMP TAPE</a></p>