

## Tinting Visors

### Supplies

2 packets of Black Idye Poly (craft store like Joann's)  
2 packets of Green Idye Poly  
Large, tall pot (at least 16 quarts for the Thomas Visor, larger for Guy Manuel)  
Thermometer for heated liquids  
Large bucket of cold water  
Towels (check your local Goodwill or thrift store)  
Bendable wire

I found my supply of Idye Poly at Joann's Fabric/Craft store, but you may find it elsewhere. Make sure you get the one for plastics, NOT the one for fabric.

If you want the visor to be black, you'll need to get Black Idye Poly as well as Green Idye Poly. I used 2 of each. Technically, the black dye looks more like a super dark red. To get the desired tint, I added the green dye to help balance the color out, since red and green are complementary colors. When you mix the two it comes out a greenish brown that will be closer to black, than the black alone (like sunglasses).

You will need a huge pot that you don't want to use for cooking ever again. Initially, I took my Guy Manuel visor out to Goodwill and various other stores to test the size by putting the visor in the pot to see if there was enough space. Most of the ones that were large enough were very expensive. I eventually settled on a set of 4 stainless steel pots from Harbor Freight for \$25 and used the 16 quart size for my Thomas visor. Guy might need a larger size. You will just need to test it.

<https://www.harborfreight.com/stainless-steel-stock-pot-set-4-pc-60624.html>

You will need a thermometer to correctly measure the temperature of the dye. I got one that plugged into a reader and hung onto the side of my pot for a continues temperature read-out.

You will need several towels (again, ones you don't plan to use for your body ever again). I bought 5 towels from Goodwill for about \$1 each. Nothing special about them, just to protect the kitchen counter, floor, etc.

Finally, you don't want the visor to sit on the bottom of the pot or touch the sides of the pot at all, so you will need some wire to make a crane or harness or claw holding type jig to hold the visor so it is able to "float in the pot"

I highly suggest doing a do a test piece first! Even if that means buying an extra small piece of PETG. You want to do a test piece so you can see how it works and not mess up on the final visor.

### **The Tinting Process:**

The basic process I used (and what he suggested) is:

1. Fill the pot with water and heat it until it starts to boil,
2. Once its boiling, add the dyes by cutting the packets and pouring them in. He suggested to not put the whole packet in with the plastic since it can leave residue marks on the plastic.
3. Mix/Stir it up good to make sure the colors blend and mix with each other after about 5 minutes or how everlong you mix the stew together for.
4. Then with that thermometer start to bring down the head for dye bath to 140F; as well as keep an eye on it so it doesn't drop and or raise too much.
5. Soak the visor for 5 min at a time (keep the visor moving while soaking, don't just drop it in and leave it);
6. Take it out and without touching the visor, briefly submerge it (still on the wire harness) in bucket of cold water (I used a 5 gallon bucket);
7. Repeat these steps until you achieve the desired color or shade you want.

Note: Make sure the temperature of the dye pot maintains the 140F temperature for each soak. Dip the visor in the cold water after each soak.

### **Two Important Points:**

1. Once tinted, you can't un-tint it. So, if you don't have a spare piece to test, or if you only have one visor and need to get it right the first time, I would suggest doing shorter soak times of 1-2 minutes. It will take longer to get to the correct shade, but it will give you a lot more control over the process, so you don't over-tint it.
2. Like they state in the video, once the visor is attached to the helmet no light will be, or should be, coming through the back so the tint will look even darker when attached to the helmet. Keep this in mind as you are deciding on the final tint color and when to stop your soaks.

### **Final tips:**

While soaking, never let the liquid settle around the visor because this can cause dark spots of dye to form on the surface. Move the wire harness with the visor in the pot as it soaks. Never leave it in the pot and walk away.

For my visors, I noticed that 5 soaks (of 5 minutes each) is dark, close to 75% opacity, more if you are in a darker room. Just keep that in mind as far as how much time overall the visor may need to soak.