



Dear Customer,

We currently sell the epoxy fillers in 4 ounce and 8 ounce sizes

Our “Sampler Kit”, which is available in 4-ounce and 8 ounce sizes is an excellent value, and provides the basic fillers that are needed. Cab-o-sil, White Micro-spheres, and Cotton Flock.

We have more fillers. White Micro-Fibers, Phenolic Micro-balloons, Wood flour, Milled Glass, Chopped Carbon Fiber, and more. We now have a “Complete Starter Kit” that includes Cab-o-sil, White Micro-spheres, Cotton Flock, White Micro-fibers, Phenolic Micro-balloons, Wood flour, Milled Glass, and ¼” Chopped Carbon Fiber.

Use of the fillers depends on the epoxy they are mixed with. 5 minute and gel epoxies tend to be thick already. Other epoxies may be much thinner. Laminating and finishing epoxies may have longer pot lives and not be nearly as thick as 5 minute and gel epoxies. They make more adjustable mixtures.

Before mixing any fillers with epoxy, you should mix the resin and hardener completely, otherwise getting the mixture fully mixed may be difficult. And curing may not be complete. Some sources say to mix the filler with the resin first. Another problem with this is that you may have to mix in fillers multiple times to get the right consistency.

To effectively understand using fillers in epoxy, you need to know the term thixotropic. A light thixotropic filler will not thicken epoxy to a non-sagging paste. Micro-Spheres and Micro-Balloons (filleting additive) are only lightly thixotropic and will bulk up a mixture and still not make it non-sagging. Using a more thixotropic filler like cab-o-sil will make the mixture non-sagging. But too much is not good and the mixture may become too dry or thick. So be careful when adding thixotropic fillers to mixtures.

Cab-o-sil is the key to making many of your mixtures what you want them to be. It does not significantly increase the volume of the epoxy or mixture it is added to. Used alone, cab-o-sil is not very sandable for fine filleting. It forms a very hard mixture. Add it gradually until you get the thickness and non-sagging nature that you want. Do the same when mixing it with non-thixotropic fillers.

Micro-balloons (White Micro-Spheres or Phenolic Micro-Balloons) bulk up a mixture and are good for filling areas than need to be shaped and sanded (filleting or fairing), but strength is not an issue. They can greatly increase the volume of the epoxy they are mixed with. The more that is added, the easier the hardened epoxy will be to sand. Mix until the volume and sandability needed is reached.

Then add some cab-o-sil or micro-fibers to form a non-sagging paste. Some people think the brown phenolics sand better. The white may be more aesthetically pleasing, especially in fiberglass parts.

Micro-Fibers are thixotropic and make a mixture very hard. If you use them in one of the filleting mixtures, you will have difficulty sanding the result to a smooth finish. But when you need to strengthen the filleting mixture and smooth it out well, Micro-Fibers can work well.

Cotton Flock is very thixotropic and can be very hard to sand. You will likely have to use a grinder to smooth it. But for making strengthening fillets like around firewalls and wing hold downs, it is a very effective mixture. Chopped Carbon Fiber also works well in that scenario.

Wood flour is good for filling hardwood cracks, but is generally too heavy for model airplane use. It is best used for filling holes in airplane firewalls made of plywood, and for filling holes and dings or mistakes in hardwoods. The mixture it forms is darker than the color of the dry wood flour itself. It does not sand easily.

Milled Fiberglass is also known as liquid fiberglass. It is not very thixotropic. But it makes for strong joints. Use cab-o-sil, or better yet, use micro-fibers to make it non-sagging. It makes a good gap filler where strength is needed. Smooth it out when applying it because it will not be sandable. A grinder will be needed to shape it.

Chopped Carbon Fiber is good for reinforcing joints where appearance is not as important as a light filler. Measure out the amount you need and mix some epoxy in a separate container. Mix into the carbon fiber to wet it out. The goal is to have enough epoxy to wet it out, but not have epoxy that is going to run off. You can use some cab-o-sil or micro-fibers to make the epoxy non-sagging. Learning to use chopped carbon fiber is best done with test pieces to learn how to work it. It is easiest to apply with acid brushes. You may even want to use needle nose pliers to transfer it to its destination and then smooth it with a brush. Even after smoothing, there can be tiny strands sticking up that can puncture fuel lines and stick fingers. A Dremel flapper can take the spikes off easily or they can be filed or sanded off.

Videos have already started coming to <http://DonStegall.com> and to <http://RCPylon.TV> with more information about epoxy fillers. Please subscribe and stay tuned for additional techniques.

Please tell your friends and colleagues about our line of epoxy fillers and other products. And stay tuned on Amazon for even more options. Just type [EpoxyFillers.Store](http://EpoxyFillers.Store) into your web browser to get to fillers on Amazon. And [StegallHobbies.store](http://StegallHobbies.store) for our line of products on Amazon.

The new [StegallHobbies.com](http://StegallHobbies.com) web site is almost ready. Look for it any day now.

If you have any questions about the fillers, contact Don Stegall for more information and answers.

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