

Proper Mixing of Filled Materials

Some of our materials contain functional fillers that will settle over time. This is an inevitable result and will vary in amount/severity due to a variety of factors including time, temperature, and viscosity. Fortunately, the fillers can usually be redispersed into the material even in the most severe cases. Below you will find some tips to help minimize settling and what to do when settling has occurred.

Minimizing Settling

Make sure to avoid storing the material at high temperatures. Increased temperatures, including during transportation, will accelerate settling.

Flip the containers every 2-3 weeks to redisperse the fillers.

In production storage tanks, it is recommended to continuously stir the material to prevent sedimentation and metering issues.

Dealing with Settling

Upon opening the container(s), you can determine the degree of settling by inserting a long spatula or paint stick into the material and feel the bottom. There are three general cases:

Low Settling – Thin layer of settled material at bottom

In cases where there is a thin layer of filler at the bottom of the container, simply stirring with a paint stick or spatula will be sufficient, taking care to dredge up the settled material. Hand mix until material is uniform and homogenous.

Medium Settling – Several inches of settled material

If the fillers have settled to where there are several inches at the bottom, but the settled material is not dried out, heat the container to 35 – 40 °C. This will decrease the viscosity of the resin and facilitate redispersion of the fillers. A mechanical mixer may be necessary to fully re-disperse the fillers.

Severe Settling – Dry, compacted settled material

If the fillers have formed a thick, dry cake, pour out the liquid into a secondary container. Wearing proper PPE, break up the cake into smaller pieces and slowly add to the container with the liquid while mixing, waiting until the fillers have been fully dispersed before adding more.

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