

NEW WAY TO COLOR FINISHED SLA PARTS

New Castle, DE (September 25, 2000) - DSM Somos® has discovered a new way to add color to finished stereolithography (SLA) parts so that customers can have prototypes that not only perform like the end-product, but also closely match it in color.

In the past, prototypers colored parts by using a commercial, aqueous-based dye. However, this method did not universally or uniformly work on all resins and would sometimes deform the part due to prolonged soaking in the hot aqueous solution. Now, by applying aniline-based dyes in non-aqueous solutions - also commonly known as leather dyes - complete and consistent coverage, in a variety of aesthetically pleasing colors, can be achieved. Somos® found that aniline-based leather dyes in an alcohol solvent penetrate the surface of prototypes made from DSM Somos® 7100, 8100, and 9100 series resins, making the color more permanent. The process is, however, partially reversible by rinsing the parts in acetone or alcohol after dyeing.

Basic materials needed to dye SLA parts include the dye, rubber or plastic gloves, a stiff-bristled brush (a toothbrush or paintbrush, depending on the part size) and paper towels.



1. If the part is small, dip the prototype into the dye. For larger parts, apply the dye to the part using a brush or the applicator contained in the dye bottle.
2. Remove excess dye from the part by dabbing it with paper towels.
3. Once the excess dye is removed, use the brush to uniformly distribute any dye remaining on the surface of the part. The brush is also useful for applying the dye in small crevices and corners.
4. Let the part dry for a few minutes.
5. Once the part is dry, rinse the part under a gentle stream of running water to eliminate any residual dye.
6. Dry the part again with paper towels. The part is now ready to be handled.

Leather dyes come in containers varying in size, usually ranging from four ounces to five gallons. One such leather dye supplier is the Fiebing Company, Inc. (www.fiebing.com), which offers a selection of 29 colors.

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