

– Technical Information –

When developing Ecotone Surfaces the goal was to use as much recycled ingredients as possible. The result is a versatile, castable engineered composites product that may be used in a variety of applications. Designers will be sure to see endless possibilities with Ecotone Surfaces.

Applications

- **Cast polymer:** Common applications include vanity deck surfaces, wall panels, tub surrounds, and table tops. Ecotone is only recommended for use in applications that are not subject to thermal cycle test standards. Bonding agents may be added to enable the use of this filler line in water submersible applications.
- **Solid Surface:** Ecotone may be surfaced with diamond tools and stone polishing equipment. It is much harder than typical solid surface materials. Additionally, sealing the surface after polishing is highly recommended. When cutting, glass may tend to chip off the newly cut edge unless bonding enhancers are utilized.

Resin Demand

Most Ecotone colors are very low in resin demand. A reference chart is shown below for each color. Low viscosity resins may require a 1-2% (or more) reduction in the recommendations provided in the chart.

Code	Color Name	Resin Demand @ 1,100 cps
ECO 504	99 Bottles	24%
ECO 508	Amber Harvest	25%
ECO 506	Azure	20%
ECO 500	Cobalt	24%
ECO 507	Coconut	21%
ECO 503	Emerald City	24%
ECO 501	Envy	23%
ECO 512	Grown in the USA	45%*
ECO 505	Kaleidoscope	24%
ECO 510	Nuts About You	23%*
ECO 502	Serenity	24%

*Too much resin and material will float to back side, leaving resin layer on surface.

Pigments

Custom colors are easily created in-house. Ecotone colors such as Kaleidoscope, Serenity, and Azure are quickly transformed into different colors by adding pigments. To maintain visual depth and translucency a low (0.03% by weight) pigment percentage is recommended. Below is an example of a color change with and without pigment respectively.

How Green is it?

Having a product that boasts powerful Green potential is crucial in today's market, especially when designers are seeking LEED® credits. That's why ACS developed colors that have visual appeal as well as Green appeal. The following list contains the post-consumer content of each color, aiding in LEED Material and Resource credits 4.1 and 4.2. Such content may include glass or an organic by-product.

Code/Color Name	♻️ %	Code/Color Name	♻️ %
ECO 504 99 Bottles	90%	ECO 501 Envy	90%
ECO 508 Amber Harvest*	90%	ECO 512 Grown in the USA*	60%
ECO 506 Azure	90%	ECO 505 Kaleidoscope	90%
ECO 500 Cobalt	90%	ECO 510 Nuts About You*	60%
ECO 507 Coconut	80%	ECO 502 Serenity	90%
ECO 503 Emerald City	90%		

Technical Considerations

Due to variations in resin bond cohesion to glass, each resin will have its own unique light refraction characteristic based on the mechanical bond and final appearance will vary from one resin to another. For accurate final appearance, samples of Ecotone Surface fillers must be produced using the resin and catalyst system utilized in each production facility. Therefore, it is recommended that each manufacturer produce samples from their process to ensure a representative final color appearance. For applications that will involve large variations in temperature or will experience weather or water exposure, the use of a bonding agent is highly recommended. Please note that using a bonding agent will change the refraction of light from behind the glass similar to a resin with strong cohesion. A bonding agent is an additive that will assist in bonding glass to polyester resins.

Renewable Resource Ingredients

There are three colors in the Ecotone line that use organic ingredients: *Amber Harvest* and *Nuts About You* use walnut shells; *Grown in the USA* uses corn cobs. Walnut shells have a MOHS rating of nearly 4 and will withstand some water contact; similar to wood. Grown in the USA is not recommended in high water use areas. Corn cobs will eventually absorb water and expand in size. Gel coat can let water molecules permeate through its surface. Because of this risk ACS does not recommend using these colors where standing water is present.

Things to Remember Before Casting

For optimal parts, the following is highly recommended:

- Air release additives, for addition air release rolling (with Fiberglass roller) the backside of the uncured part may help.
- Add catalyst (~1.5%) to resin before adding to filler
- Thinner resins (less viscous) often result in less air entrapment
- Start with LESS resin and add as needed to avoid warping
- Vibration is necessary

*Gel coat should be used with these colors, especially Grown in the USA. Special considerations should be taken if no gel coat is used with other organic colors. ACS is not liable for issues with organic colors that are used in high water use areas. This is strictly the responsibility of the fabricator.