Frequently Asked Questions

What is e.dye?
e.dye® Waterless Color System™ offers an environmentally sustainable process for dyeing fabrics. Using the solution dyed polyester process, e.dye® requires no water to dye synthetics. By adding the color before the polymers are extruded, the color is inside the yarn, resulting in superior color performance.

How is it made?
e.dye® uses the proven solution dye process to put color directly inside polyester yarn filaments, before they are even spun into yarn. Previously, solution dyed polyester was limited by its color range, but e.dye® has expanded the color range, and made the process more efficient.

What about colorfastness?
In addition to significant water savings, e.dye® delivers a superior finished product. Since the color is inside the yarn in contrast to outside the yarn with traditional water-dye process, e.dye® color is permanent. The colors won't fade or bleed on to adjacent colors

Why are traditional dye methods so harmful?
The damage caused by the current dye process comes from a 250 year old industrial process that uses water, chemicals and heat to dye fabrics. The existing industrial process was designed to color cotton and wool and never adapted to fit synthetic fibers. It's time to change that.

Where is it made?
Located 90 minutes from Shanghai, the 160,000 square foot three-story e.dye® Innovation Center includes management offices, test lab and pilot factory.
The e.dye® Innovation Center has created formulas for more than 3,800 vibrant colors. The Masterbatch colors are mathematically derived pigment and dyestuff formulas. We can produce the exact color time after time – from color approvals, to prototypes, through salesman samples and from one bulk order to the next.

What is Masterbatch?
The Masterbatch is mathematically derived pigment and dyestuff formulas. We can produce the exact color time after time – from color approvals, to prototypes, through salesman samples and from one bulk order to the next. When you select an e.dye® color from our color book, you are seeing the result of an industrial process that created this exact color – not an imaginary target. It's the actual color you will see in the fabrics you make into products. They're repeatable, they can be duplicated time after time. That's not the case with any other color system. Other color systems aren't tied to an industry process. With our Innovation Center and pilot factory we have a proven process. When it comes to color variability, we've scientifically reduced that possibility.

How does e.dye® affect production timelines?
Compared to traditional processes, e.dye® requires color decisions to be made at the right time: first. That's a shift in thinking, and we have the technical support to shepherd this process to success. Brands we are working with have found that the timeline is within 3-5 days of traditional processes. The big advantage is that once the color is set it never changes. With traditional dye processes, the lab dipping process is always time-consuming, costly and the most disappointing part of the color development. The e.dye® Waterless Color System™ can dramatically reduce the lab dip approval process and assure superior color matching to the designers desired color - not a compromised color such as those available using conventional piece dye.

How much water is saved?
For decades, traditional industrial dyeing processes have remained unchanged. Originally designed to dye cotton and wool, conventional dye processes use super-heated water mixed with dyestuffs and chemicals to infuse synthetic fibers with color. At least 3 gallons of water are needed for each yard of dyed synthetic fabric, based on research we have available upon request.

Are there any other environmental impacts of e.dye®?
In addition to water savings, e.dye®'s process requires less energy, reduces $C0_2$ emissions and limits the chemicals used in traditional production processes. e.dye has established an environmental product declaration to document and verify the environmental benefits, based on an LCA conducted by Swerea.