

GreenShield® Fabric Finish

GreenShield® is a fluorocarbon, stain resistant, permanent water repellent treatment that is formaldehyde free, produces no VOC's, and uses only one-third of the chemicals used in other finishes. GreenShield® is not merely a surface coating. Inspired by nature, GreenShield® uses nano-technology to create a surface on your fabric which is similar to that of a plant leaf, which allows water and oil droplets to roll right off.

Products can only be as sustainable as the materials and processes used to make them.

The processes used in the manufacture of GreenShield® are designed in a way that maximizes product performance while minimizing environmental, health and safety risks.

- **USES BENIGN MATERIALS — water based formulation**
- **USES ENERGY EFFICIENTLY — low temperature process to minimize energy requirements**
- **GENERATES NO WASTE**

Through the principle of micro-roughness, GreenShield® reduces the use of fluorochemicals on fabrics. Undetectable to human touch, the microscopic surface roughness of GreenShield® allows water and oil to roll off the surface of the fabric resulting in water and oil repellency and stain resistance.

- **Reduces Fluorocarbons by 7–10 Times**
- **Is Safe and Environmentally Friendly**
- **Completely Water-based Formulation**
- **Permanent with Excellent Wash-Durability**
- **Improved Hand and Feel**

BigSky Technologies, the manufacturer of GreenShield® believes in third party certification, which is a procedure by which a third party, independently tests and provides assurance that a product conforms to specified requirements.



SCS LOW FLUOROCARBON TREATMENT

GreenShield® delivers outstanding stain resistance to fabrics, equivalent or better than that of leading commercial brands, but reduces dramatically the amount of chemicals that negatively impact the environment.

Evaluated by MBDC

When GreenShield® is applied to a fabric, the total fluorochemical concentration in the finished product is less than 1000ppm (0.1%).

GreenShield® Fabric Finish Question and Answer Sheet

1. Is GreenShield® similar to Crypton® and other finishes on the market?

Yes, in that the finish is made to make cleaning fabrics easy. There are a number of these type finishes on the market today, and each one carries a trade name (similar to car brand) but the technology is very similar from brand to brand.

2. How long does the GreenShield® finish stay on the fabric?

The GreenShield® finish is applied to fabric using standard industry processes; this patented finish is chemically bound to the fiber of the fabric. The finish is expected to last through the life of the fabric.

3. Is GreenShield® a fabric?

No. GreenShield® is a low-fluorocarbon based chemical finish for fabrics.

4. Can I clean GreenShield® treated fabrics?

Yes. Fabric treated with GreenShield® is rated as W/S, so is resistant to water and solvents. Most stains can be easily cleaned with light brushing and/or water or non-solvent based cleaners.

5. Does GreenShield® have a barrier backing?

No. GreenShield® normally does not have a barrier backing. However, a backing can be applied if needed.

6. Does GreenShield® help with LEED points?

The GreenShield® finish is certified through Scientific Certification System (SCS); one can obtain LEED points by using the GreenShield® finish on a textile product.

7. Can the GreenShield® finish go on any fabric?

The GreenShield® finish can go on any fabric that can safely pass through the curing process at greater than 250 degrees Fahrenheit temperature. It may not be recommended for velvet and some delicate fabrics. Our finisher can determine this. If GreenShield® is not a good match for a specific fabric due to the heat set process, a similar product can be applied as an alternative that will give similar cleaning results as GreenShield®.

8. Does the GreenShield® finish cost more?

No. The price of GreenShield® is similar to other commercial fabric finishes.

9. Do GreenShield® treated fabrics have VOC's?

No. The GreenShield® treated fabrics have no VOC's (volatile organic compounds). The GreenShield® treated fabrics have been certified through SCS to be in compliance with indoor air quality standard CA 01350.

10. Does GreenShield® have formaldehyde?

No. The GreenShield® finish does not use formaldehyde.

11. Does GreenShield® change the color of the fabrics?

No. Due to the significantly reduced chemistry, the GreenShield® finish shows improved colorfastness relative to other treated fabrics.

12. Does the GreenShield® finish cause shrinkage in the fabrics?

As with all water based finishes that are cured with heat, shrinkage can occur from time to time. This will happen more often on natural fibers and loosely woven fabrics than with synthetics. The safest way to assure adequate "finished" yardage when using the GreenShield® finish is to add approximately 5% additional fabric to your original order.

13. Are the GreenShield® treated fabrics breathable?

Yes. Nanoparticle-based GreenShield® finish does not change a fabric's breathability.

14. How does GreenShield® compare to the Nanotex finish?

The Nanotex finish is a fluoropolymer based finish that provides water and stain resistance to a fabric, while the GreenShield® finish is an inorganic nanoparticle-based multifunctional finish that provides equivalent water and stain repellency with 7-10 times less fluorochemical.