
Stain Resistant Finishes

Today, high performance finishes have proven to be instrumental in extending the life span of a fabric in a more demanding environment. These finishes include Nano-Tex®, Crypton®, GreenShield® and a non-branded stain resistant option we offer these finishes built into some of our products as well as the option of applying them on some of our more decorative, textural materials which extends the life of a fabric through moisture and stain repellency. This venue has led to some wonderful opportunities and we encourage you to review this option with your clients who are looking for more choices in performance suitable options. Information regarding minimums/price can be found on the HBF Textiles website in the price list under special finishes.

GreenShield®, one of the finishes mentioned above, has continued to grow in popularity primarily due to its strong environmental story with its multi-functional technology that provides water and oil repellency and stain resistance. GreenShield® offers a single finish solution with greater efficiency than each function delivered separately.

Key Facts about GreenShield®

- GreenShield® uses 7-10 times less fluorocarbons to deliver better water and oil repellency vs. other stain resistant finishes that are currently available.
- Is a non-emitter, releasing no VOCs (Volatile Organic Compounds).
- Permanently adheres to the fabric as a mesh network, eliminating concerns of air-borne nano-particles.
- Based on amorphous silica nano-particles that are also used for such applications as toothpaste and cosmetic creams. Amorphous silica (sand) is a GRAS listed material. (Generally Recognized as Safe).
- No PFOS or PFOA fluorochemicals.
- Permanent finish with excellent wash-durability.
- Improved hand and feel of this finish vs. other more characteristically stiff finishes.
- Third party testing lab, SCS (Scientific Certification Systems) has certified GreenShield® as a Low Fluorocarbon Treatment product.
- MBDC has assessed GreenShield® Cradle-to-Cradle Silver rating when applied to MBDC Silver or Gold assessed fabrics. In other words this finish will not negate the fabrics environmental attributes the way other finishes in the marketplace do.
- GreenShield® can also be applied to additional loomstate products within the HBF Textiles offering. A pre-test with GreenShield® is recommended prior to all applications. We will begin a database similar to Nano-Tex™ as items are pre-approved. For additional assistance, contact HBF Textiles Customer Service or www.greenshieldfinish.com.

Stain Removal

The best time to deal with any spill is immediately. Because of GreenShield's water and oil repellent properties. Most spills on a GreenShield® treated fabric will be sitting on top of the fabric. Immediate gentle blotting of a simple liquid spill such as coffee or wine with a clean, absorbent cloth or paper towel will often completely remove the spill. If there are solids in the spill (mustard, tomato sauce, etc.), it is best to remove the solids with something like a spoon before blotting the spill. Do not rub at the spill since that may push it into the fabric or make it bigger. If the spill is large, remember to blot toward the center so that you do not spread it. If the spill is not completely removed by blotting, the application of a fluid may be necessary. Before selecting a cleaning system, be sure to check the manufacturer's instructions for the fabric and do not use cleaning materials which may damage the fabric itself.

The GreenShield® protective finish itself is generally not removed by treatment with spot stain removers. The GreenShield® finish may be used with either water or solvent based cleaners. However, it is the fabric itself that determines which types of treatments are useful. The makers of GreenShield® strongly recommend cleaning solutions with minimal environmental impact.

Lightly wetting the surface of the fabric with water and repeated blotting will pick up the remnants of many spills. Blotting the surface of a spill with a dilute solution of liquid detergent in cool water followed by blotting with a dry absorbent cloth will pick up slightly more stubborn stains. Hot water may set the stain and is not recommended. Rubbing gently with a cloth or a soft brush can be useful but hard brushing may alter the texture of some fabrics and therefore is not recommended. Removing more difficult stains and stains that have dried will require more effort. First, brush or vacuum off any dried component of the spill (mustard, betadine, etc.). Then, lay a damp cloth flat on the stain and blot with gentle pressure. If part of the stain is removed, repeat until removal is complete. If complete removal is not achieved, the same procedure can be used with a dilute, mild detergent. Following are a few examples of stain removal processes for a few selected spills.

Mustard

Mustard spills on a GreenShield® fabric will dry into beads or strands which will separate from the fabric and are removed simply by brushing the fabric or picking them up. A very small residue is removed by blotting with a damp cloth followed by drying with an absorbent towel.

Coffee

Coffee spills on a GreenShield® fabric will dry into small concentrated brown specs. Repeated blotting with a damp cloth picks up the spots and the area dried with an absorbent towel.

Betadine

Betadine spills on a GreenShield® fabric will dry into small concentrated reddish brown spots. The “plastic-like” spots sit on top of the fabric and can be removed by picking at the edge and lifting them off. Alternate blotting with wet and dry towels may remove the small residue remaining entirely or treatment with a dilute solution of a low residue detergent may be needed. (If the physical residue is not removed, the spots can be removed with prolonged blotting using the detergent solution.)

Italian Dressing

Italian Dressing spills on a GreenShield® fabric will dry into a soft pasty residue that can be rolled off of the fabric and picked up leaving a small residue on the top of the fabric. The surface may be gently blotted with a dry piece of paper towel followed by blotting with a dilute solution of detergent. The spotted area can be blotted with a damp cloth and then dried by pressing on a towel.

If these simple methods fail, it will be necessary to select a cleaning solution that is appropriate for the fabric and the composition of the stain. Many different types of spot cleaning solutions are available and can be purchased or formulated at home. A particular cleaner may be vastly superior for a particular stain or a sequence of treatments may be best, but mixing components is not recommended. (Chlorine bleaches should NOT be used with either ammonia or vinegar.)

Apply the selected cleaning solution directly to the stain as recommended by its manufacturer. Do not over wet. Allow the wetted fabric to sit for a time and then blot with a clean white cloth or paper towel. Repeat as needed. Depending on the cleaner's instructions, a final water rinse may be recommended. Finally, dry the treated area by placing a weighed white towel on top of it.

It is impossible to evaluate all available cleaners, but a number have been tested for both spot removal and their impact on the GreenShield® treatment. Water-based spot cleaners that have been found to be compatible with fabrics using GreenShield® fabric finish include:

- Woolite® Upholstery Cleaner
- Woolite® Oxy Deep®
- Resolve® Multi-fabric
- Shout® Advanced
- Folex®
- Once'n Done®

Few solvent based spot cleaners have been evaluated with GreenShield®. Solvent cleaners based on hydrotreated aliphatic hydrocarbons (such as Solv-a-Clene™ and Goo Gone®) were compatible with GreenShield® as was isopropyl alcohol (rubbing alcohol).