

Technical Data Sheet

EverShield – Durable Omni Repellent

EverShield is a Durable Omni Repellent (DOR) capable of imparting oil, water and stain repellency to a wide range of fabric types over the course of 50+ washes. EverShield has been applied to natural, synthetic, and aramid fabrics, as well as blends of these materials.

Storage: The product is sensitive to temperatures below 32°F (0°C) and heat above 104°F (40°C).

TYPICAL PROPERTIES

| Appearance: | Milky-White liquid |
|-------------------|--------------------|
| pH: | 6.5 |
| Viscosity: | 4-5 cP |
| Relative Density: | 1.043 |
| Solid Content: | 13.41% |
| VOC: | 0.25% |

APPLICATION GUIDE*

EverShield performs up to 50 washes, delivering water repellency (up to 75-85 Spray Rating) and oil repellency (up to 6B Oil Rating). UltraTech can provide performance data on varying EverShield concentrations at different wash cycles. 20 Wash Performance Data

- For 80 Spray Rating and 4B Oil Repellency after 20 washes, use 100 g/L EverShield Concentrate
- For **85** Spray Rating and **6A** Oil Repellency after **20** washes, use **225** g/L EverShield Concentrate
- For **90** Spray Rating and **7B** Oil Repellency after **20 washes**, use **375 g/L** EverShield Concentrate

*Note: Fabrics tested: 6.5 oz/yd² ripstop 50% nylon, 50% cotton (NYCO), and 8 oz/yd² 100% woven cotton using AATCC 135 Test Method for Home Laundering using cold water wash temperature and hot temperature dry. Detergents are neutral liquid, free of dyes and perfumes. Spray Ratings are per AATCC 22 and Oil Ratings per AATCC 118.

Notes on Solution Mixing:

- 1. EverShield Concentrate is milky-white in color with viscosity between 4-5 cP and a pH of approximately 6.5.
- 2. DO NOT SHAKE EverShield Concentrate will foam when shaken. Mix gently. Defoamers are not recommended.
- 3. The final diluted mixture should have a viscosity near 2-4 cP and a whitish color.

4. The final diluted mixture should have a pH between 6 and 8.

Drying and Curing Conditions

Drying will depend on oven temperature, fabric weight and wet-pickup. After the fabric has dried of excess water, the surface of the fabric should reach at least 302-320°F (150-160°C) for a minimum of 30-90 seconds to allow for the EverShield to properly cure. If unable to measure fabric surface temperature, a good recommendation is a curing cycle of 320-340°F (160-170°C) for 60-120 seconds.

Potlife of Mixture

Once mixed into a diluted solution, use within 24 hours. The stability of the diluted solution has not been extensively tested beyond 24 hours. For best results, mix the dilute solution again just before application.

Washing and Drying Conditions

We follow the AATCC 135 Test Method for Home Laundering using cold water during wash and rinse cycles and high heat during the dry cycle. Recommended detergents are neutral liquid, free of dyes and perfumes. The chemistry of EverShield was designed for sustainability. Cold water washing saves energy and money during the washing and rinse cycles, and detergents free of dyes and perfumes reduce the spread of harsh chemicals into the environment. Straying from these guidelines may affect the performance of EverShield. We recommend following them in order to ensure best performance and to minimize the environmental impact caused by washing clothes. The use of industrial wash standards is not recommended.

Antimicrobial Compatibility

EverShield has been tested for compatibility with Triclosan and Ultra-Fresh.

GENERAL NOTICE

In order to obtain optimal performance, the goods to be finished with EverShield should be prepared such that they are free from processing chemicals, including residual dye, size, wetting agents, surfactants, and softeners.

This technical data sheet provides guidelines for applying EverShield. It does not guarantee performance. Because of the wide variety of textile products, the exact effect that EverShield has on color, hand, odor, strength, fastness and other fabric properties cannot be known without testing. It is the responsibility of the user to perform trials to determine this performance, based on the user's available equipment and conditions. The guidelines provided herein are consistent with our present state of knowledge. It is the user's responsibility to follow rules and regulations in the user's locality. Consult the EverShield Safety Data Sheet for additional safety and environmental information.

