

# **Technical Data Sheet**

## EverShield ZERO19 – Fluorine-Free Durable Water Repellent

EverShield ZERO19 is a fluorine-free Durable Water Repellent (DWR) capable of imparting excellent water repellency to natural and synthetic fabrics over the course of numerous washes.

Storage: The product should be stored between 40 °F (5 °C) and 86 °F (30 °C).

## **TYPICAL PROPERTIES**

Appearance:	Milky-White liquid
pH:	4.0-5.0
Relative Density:	0.94 - 1.04
Solid Content:	32-36%

EverShield ZERO19 is water-based.

### **APPLICATION GUIDE\***

For 100 Spray Rating after 20 washes, use 40 – 60 g/L.

40 g/L = 4.0% 60 g/L = 6.0%

\*Note: Fabric tested: 5.3 oz/yd<sup>2</sup> 100% woven polyester, 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.

#### Notes on Solution Mixing:

- 1. EverShield ZERO19 is milky-white in color. It has a pH of approximately 4.0 5.0.
- 2. DO NOT shake or mix at excessively high speed EverShield ZERO19 will foam when shaken or mixed at high speeds. Mix gently. Defoamers are not recommended.
- 3. The final diluted mixture should have whitish color and should have a pH between 4-5. Adjust with acetic acid.

## **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 ZERO19 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 ZERO19 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 ZERO19. We recommend following them to ensure best performance and to minimize the environmental impact caused by washing clothes. The use of industrial wash standards is not recommended.

## **GENERAL NOTICE**

To obtain optimal performance, the goods to be finished with EverShield ZERO19 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 ZERO19. It does not guarantee performance. Because of the wide variety of textile products, the exact effect that EverShield ZERO19 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 ZERO19 Safety Data Sheet for additional safety and environmental information.

