



The GreenShield® Company

Technical Information

GreenShield® C6XL fabric finish

Nanoparticle based water and oil repellant finish for textiles

1 Properties

| | |
|--------------------------|--|
| Chemical Character | fluoropolymer silica mixture in water |
| Concentration | 14 - 18% |
| Appearance | off-white dispersion |
| pH | 4-6 |
| Dilutability | Miscible with water |
| Effect on hand and color | None |
| Storage | Can be stored for a year or more at normal conditions. Should not be frozen. |

2 Application Properties

GreenShield® fabric finish provides excellent stain resistance and oil and water repellency to fabrics using 6-10 times lower fluorochemicals relative to competitive fabric finishes. GreenShield can be used on many fabrics, including polyester, cotton, polypropylene, nylon, rayon, and blends of these and other fabrics. Fabrics treated with GreenShield retain their properties through 25 for more washing cycles.

3 Application

GreenShield can be applied to fabrics using conventional coating methods, such as roll coating, padding, spray coating, or foaming. Typically GreenShield is diluted to 1-5% in water, although this depends on fabric type, weight, pre-treatment, and various factors. Typical drying and curing temperatures range from 120C to 175C, depending on the type of fiber and the process.

4 Treatment examples

The following fabrics were treated with 3% concentrations of GreenShield C6XL fabric finish.

The treated materials exhibited excellent water and oil repellency and spray results, as shown below.

| Description | Water drop | Oil drop | Spray test (%) |
|--------------------|-------------------|-----------------|-----------------------|
| 100% Polyester | 6A | 10A | 100 |
| 100% Polypropylene | 6A | 9A | 100 |

Results will vary depending on fabric treatment, color, weave, weight, GreenShield, concentration, cure temperature, etc.

Water repellency per AATCC 193

Oil repellency per AATCC 118

Spray test per AATCC 22

.