

WHAT CONSUMERS ARE SAYING: ^{1,2}

67%

SAY PERFORMANCE FEATURES ARE IMPORTANT IN THEIR CLOTHING PURCHASE DECISIONS

59%

SAY THEY ARE LIKELY TO SEEK OUT WATER REPELLENT TECHNOLOGIES WHEN SHOPPING FOR ACTIVEWEAR

50%

ARE WILLING TO PAY MORE FOR WATER REPELLENT APPAREL

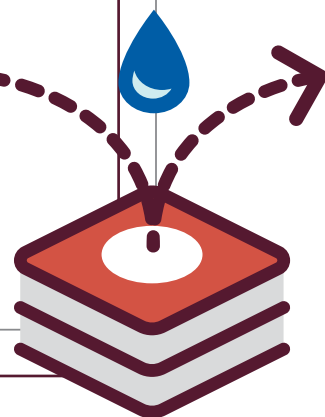
BREATHABLE PERFORMANCE THAT KEEPS YOU DRY.

Designed to repel moisture, STORM COTTON™ technology is a durable water repellent (DWR) finish for any cotton garment that can outlast other standard finishes. Whether you're exploring your favorite hiking trails or canoeing down a river, STORM COTTON™ technology will keep you comfortable, cool and dry. You shouldn't have to worry about your clothes performing so get outside and play – cotton can handle your favorite adventures, rain or shine.



WATER REPELLENT TECHNOLOGY THAT BREATHES BETTER THAN STANDARD DWRS.

- Repels moisture from the surface of the fabric
- Maintains the natural comfort and breathability of cotton
- Dries faster than untreated cotton
- Lasts the life of the garment
- Meets supply chain needs with clean chemistry options





MOISTURE RELEASE

**NO REDUCTION IN
FABRIC BREATHABILITY**

as measured by ASTM D737



**PROTECTION THAT'S PROVEN
TO LAST.**

WHAT IS STORM COTTON™ TECHNOLOGY?

STORM COTTON™ technology is a water repellent finish for cotton that offers protection from rain and snow while maintaining the natural comfort and breathability of cotton. The STORM COTTON™ finish gives improved performance over other durable water repellent treatments by maintaining excellent repellency performance throughout the life of the garment. The STORM COTTON™ finish can be applied in fabric or garment form to knits and wovens, including denim.

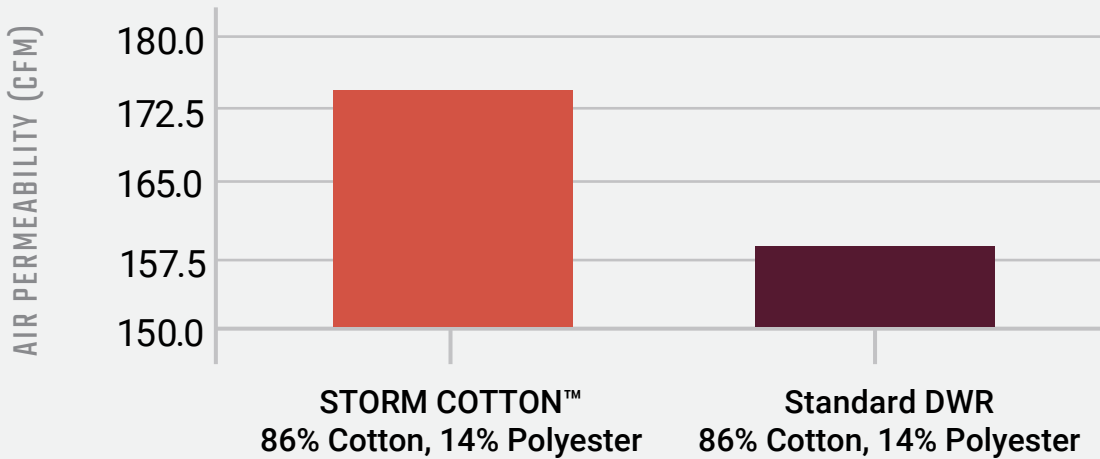
- **KNITS**
- **WOVENS**
- **DENIM**
- **HOME TEXTILES**
- **SWEATERS**
- **FLEECE**
- **OUTERWEAR**

PROVEN PERFORMANCE.

STORM COTTON™ technology is durable throughout the life of the garment, unlike competing DWR finishes. The spray repellency test measures the resistance of fabrics to wetting by water. Even after 30 home launderings, the STORM COTTON™ finish remains on the fabric unlike other DWR finishes. Many water repellent treatments inhibit a fabric's ability to breathe and transfer moisture vapor effectively. That's what is so great about cotton. STORM COTTON™ technology does not affect the natural ability of cotton fabrics to breathe and keep you cool. Although it repels liquids, the finish still allows moisture vapor to pass through the fabric where it can dissipate into the environment, naturally keeping you more comfortable. Don't take our word for it. Standardized test methods prove the point.

AIR PERMEABILITY COMPARISON

ASTM D737



** The higher the value, the more permeable the fabric.*

VERSATILE APPLICATION.

STORM COTTON™ technology can be applied in both fabric form and garment form. The fabric application process is done by padding the finish onto the fabric, drying the fabric, and curing with the necessary time and temperature to achieve the highest level of performance. In garment form, the finish is applied through garment dipping or by metered spray application in a garment machine. The garments are then cured at the necessary time and temperature. The finish is versatile and can be applied to best meet the needs of your supply chain with suppliers all around the world.



JEANS FOR EVERY ADVENTURE.

— STORM COTTON™ TECHNOLOGY + DENIM.

The STORM COTTON™ technology recipe and finishing steps can be tailored specifically for denim to achieve optimal performance. Denim is more prevalent than ever – from hiking, casual wear, skating, biking, traveling to working on the jobsite, consumers are wearing their favorite pair of jeans anywhere and everywhere. Savvy consumers expect more from their denim and the STORM COTTON™ technology elevates performance while keeping the look and feel that consumers love about their jeans. With STORM COTTON™ technology, there's no limit to what your favorite jeans can do.

**STORM COTTON™
TECHNOLOGY CAN
BE COMBINED WITH
ANTIMICROBIAL
AGENTS TO KEEP
YOUR JEANS FRESH
AND CLEAN WITH
EACH WEAR**

ENGINEERED SPECIFICALLY FOR DENIM.

The STORM COTTON™ finish is primarily applied in garment form. The finish can be applied to open width fabric, but the most common application is either through garment dipping or metered spray application. This allows for greater flexibility to apply various garment finishing techniques to achieve the desired styling and appearance of the finished product. The garments are cured after the finish has been applied in order to help set the finish into the fabric.

LONG-LASTING PERFORMANCE.

The STORM COTTON™ technology outperforms a standard DWR finish when tested for spray repellency and is proven to last the life of the garment. The spray repellency test measures the resistance of fabrics to wetting by water.

UP TO 100%
IMPROVED
DURABILITY TO
LAUNDERING
AFTER 30
WASHES

STORM COTTON™ SPRAY TEST FOR REPELLENCY

AATCC 22 Spray Test for Repellency

# OF WASHES	STANDARD DWR FINISH	STORM TECHNOLOGY
0	90	100*
10	70	90
20	50	90
30	0	70



90 rating is minimum for STORM TECHNOLOGY before wash 70 rating is minimum for STORM TECHNOLOGY after 30 washes

* Up to 100 rating after 0 washes



NATURAL PERFORMANCE.

A SUSTAINABLE SOLUTION.

Proven performance doesn't have to harm the environment. Consumers already know cotton is the best fiber choice for the environment – 91% of consumers consider cotton to be the safest compared to 45% of consumers who believe polyester is safest.¹

With the ever-growing challenge of microplastic pollution, your clothing shouldn't pose a threat to our earth or our oceans.³ Cotton fiber biodegrades in soil and wastewater at a much faster rate than polyester.^{4,5} Cotton is known for its quality and durability, but in the laundry and at the end-of-life, you can feel better about that cotton garment and its effects on the environment. Your clothes should love the great outdoors as much as you do.

**COTTON DEGRADES
95% MORE THAN
POLYESTER AFTER
250 DAYS IN
WASTEWATER.⁵**

**COTTON DEGRADES
99% MORE THAN
RECYCLED
POLYESTER AFTER 84
DAYS IN A COMPOST
ENVIRONMENT.⁴**

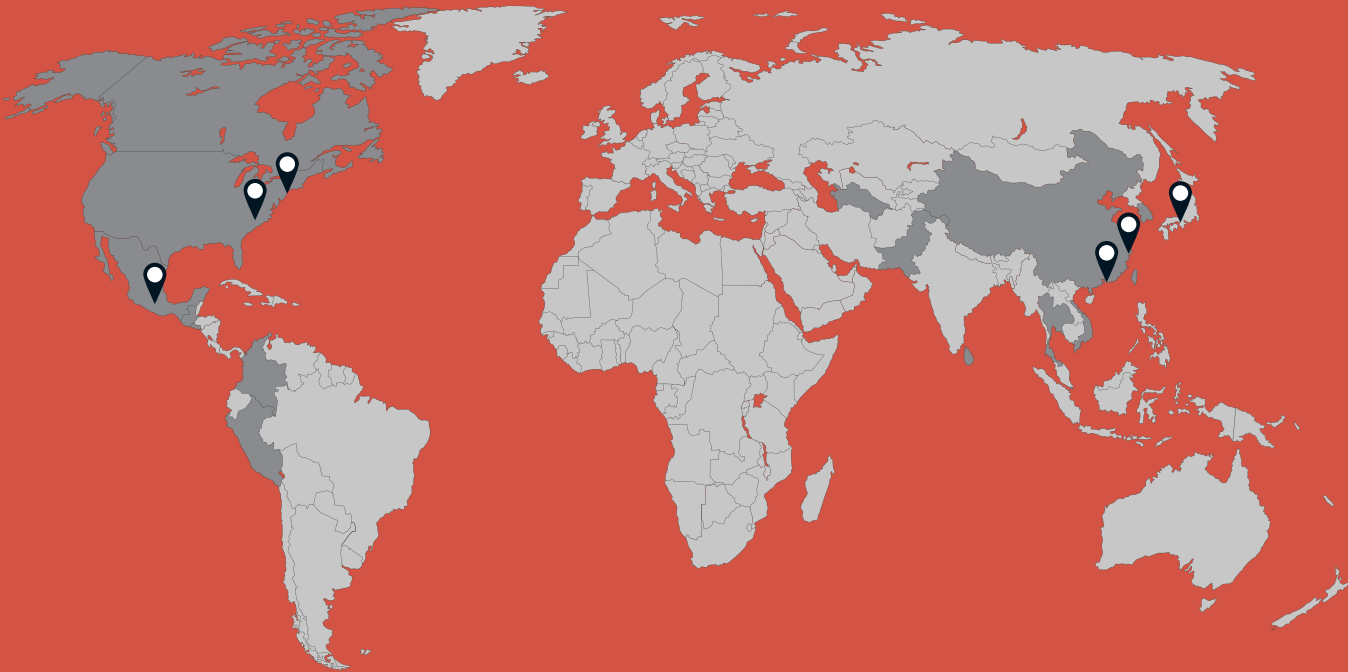


CLEAN CHEMISTRY.

Many water repellent chemistries contain fluorinated compounds to repel moisture and the finish formulas contain perfluorooctanoic acid, or PFOA. The U.S. Environmental Protection Agency (EPA) has investigated issues concerning PFOA and fluorochemicals and there has been interest in finding alternatives to PFOA.⁶ The standard perfluorinated molecules contain an 8-carbon chain structure (C8) that does not break down quickly in the environment.

The STORM COTTON™ technology provides an alternative to the C8 chemistry: a shorter carbon chain structure (C6) finish and fluorocarbon-free finish. Performance is not sacrificed and spray repellency ratings are still able to be met, while providing a sustainable industry solution for a durable water repellency finish.

**STORM COTTON™
TECHNOLOGY IS 96%
BIOBASED CERTIFIED
BY THE USDA
BIOPREFERRED®
PROGRAM**



Cotton Incorporated global offices:

- New York, NY, USA
- Cary, NC, USA
- Mexico City, Mexico
- Osaka, Japan
- Shanghai, China
- Hong Kong, China

GLOBAL AVAILABILITY.

WE CAN ENGINEER A SOLUTION FOR YOU.

STORM COTTON™ technology was developed by Cotton Incorporated. We work with suppliers around the world to implement the technology within existing supply chains and we make it easy for brands and retailers to use the technology on cotton products.

Marketing resources available for use and inspiration:

- Hangtags and other point-of-sale collateral
- Knit and woven fabric developments
- Licensed technology logo on products that meet fabric performance criteria

STORM COTTON™ technology suppliers are available in:

- *Canada*
- *China*
- *Guatemala*
- *Hong Kong*
- *Mexico*
- *Pakistan*
- *Peru*
- *Singapore*
- *South Korea*
- *Sri Lanka*
- *Taiwan*
- *Thailand*
- *Turkey*
- *United States*
- *Vietnam*



STORM COTTON

To feature the STORM COTTON™ technology and logo on your products, contact your Cotton Incorporated account representative.

Learn more at cottonworks.com.

Source: 1. Cotton Incorporated's Lifestyle Monitor™ Survey; 2. CCI & Cotton Incorporated 2016 Activewear Study; 3. Accumulation of Microplastic on Shorelines Worldwide: Sources and Sinks. Mark Anthony Browne, et al. Environmental Science & Technology 2011 45 (21), 9175-9179. DOI: 10.1021/es201811s; 4. Li, Lili; Frey, Margaret; Browning, Kristie. Biodegradability Study on Cotton and Polyester Fabrics. Cornell University, October 2008 - September 2009; 5. Zambrano, M., et al. The Generation and Aquatic Biodegradation of Microfibers Produced from Laundering Fabrics. NC State University, Raleigh, NC, USA. Cotton Incorporated, Cary, NC, USA; 6. EPA Website: <https://www.epa.gov/pfas/basic-information-about-and-polyfluoroalkyl-substances-pfass#tab-1>