

DOWSILTM Emulsions for durable water repellent finishing

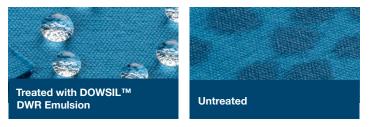
Creating water repellent fabrics that maintain their performance over time has been a focus for the textile industry for years, particularly within performance apparel and technical textiles.

These applications prioritize key advantages such as durable water repellency (DWR), stretchability, breathability, reducing seam slippage, supporting water-based stain protection, and maintaining color vibrancy for a wide range of fibers.



Initial spray rating Multi-fabric Spray rating - 20 washes performance 6 Bundesmann -20 washes Tape / logo adhesion DOWSIL™ IE-8749 Emulsion — DOWSIL™ IE-9100 Emulsion • • Benchmark non-fluorinated

Typical values, not to be construed as specifications. Users should confirm results by their own tests.



Revolutionizing fabric performance

A wide array of sports apparel, garments, outdoor garments and equipment, workwear (personal protective equipment), and footwear crafted from diverse textile compositions, necessitates all levels of water repellency, including DWR, tailored to their specific end use. In addition to DWR performance, numerous product attributes play a pivotal role in enhancing consumer benefits, ease of use, and enhancing operations within textile mills.

To address these challenges, Dow has created two innovative DWR materials: silicone-based DOWSIL™ IE-8749 Emulsion and DOWSIL™ IE-9100 Emulsion, an 81% biobased siliconeorganic hybrid.* These products have been engineered to match the water-repellency performance of fluoro-containing emulsions in the development of high-performance outerwear fabrics,

including athletic wear. They feature exceptional durable water repellency, stain resistance, and color vibrancy even after 20+ wash/dry cycles.

The ability to finely tune the hand-feel of the fabric, ranging from ultra-soft to firm, renders DOWSIL™ IE-8749 Emulsion and DOWSIL™ IE-9100 Emulsion an excellent choice for garments with direct skin contact. These novel materials, while different in formulation, share many benefits. They are easy to dilute in water and combine with extenders and other auxiliaries such as penetrants, to tailor performance to application requirements. These new product innovations are designed to advance durable water repellency in the development of athletic and outerwear fabrics, as well as outdoor textiles for personal protective equipment, furniture, umbrellas, awnings, and more.

DOWSIL™ IE-8749 Emulsion

Features and benefits

- · Proven silicone technology
- · Exceptional water repellency according to industry standards
- · Durable: excellent water repellency even after 20 home laundering wash cycles
- · Versatile: applicable on a wide range of fibers, natural or synthetics
- · Maintains breathability of fabrics and membranes to maximize comfort
- · Soft touch and scratch resistance
- · Low seam slippage compared to other silicone technologies
- · Compatible with current manufacturing processes
- · 70% high solid content
- OEKO-TEX ECO PASSPORT certification





DOWSIL™ IE-9100 Emulsion

Features and benefits

- · 81% biobased according to the U.S. Department of Agriculture
- · Exceptional water repellency according to industry standards
- · Durable: excellent water repellency even after 20 home laundering wash cycles
- · Versatile: applicable on a wide range of fibers, natural or synthetics
- · Maintains breathability of fabrics and membranes to maximize comfort
- · Protects from common water-based stains, while retaining color's vibrancy
- · Good tape adhesion and logo printability
- · Compatible with current manufacturing processes
- · 50% high solid content
- · OEKO-TEX ECO PASSPORT certification









Learn more

We bring more than just a high-quality portfolio of advanced silicone-based materials. We bring successful process and application experience, a network of technical specialists, a reliable global supply base, and high-class customer service. To find out more about Dow's Durable Water Repellents, visit dow.com/dwr.

How can we support your latest innovation?



Dow Textiles website: dow.com/textiles





dow.com/contactus



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