

MICROFIBER & MICRODENIER

What should you know about Denier & Superior Efficacy?

Denier is a unit of measurement used to determine the fiber thickness of individual threads used to create fabrics. Microfiber is a broad term for synthetic fiber finer than one or 1.3 denier thickness, which is 1/100th the diameter of a human hair. A microdenier is a fiber with a linear mass density of 1 denier or less.

Cleaning efficacy refers to the effectiveness of a cleaning process in removing contaminants and dirt from surfaces, often measured by the level of microbial reduction or removal. High efficacy is crucial for preventing the spread of infections by removing pathogens and reducing the risk of disease transmission.

WHY MICROFIBER FOR CLEANING?

Microfiber is known for its cleaning and drying capabilities. It is a strong cleaning solution due to its durability, absorbency, and versatility, so it's a popular choice for various cleaning applications.

The most common cleaning microfiber combines two basic fibers, Polyester and Polyamide (a Nylon by-product). These fibers are usually split and then woven into a fabric of 80% Polyester (the scrubbing and cleaning fiber) and 20% Polyamide (the absorbing and quick-drying fiber).

When selecting a microfiber cleaning solution, you must consider the surface texture being cleaned, the efficacy quality required, and the cleaning chemistry release needed. Quality manufacturers design the microfiber fiber blend to suit the cleaning purpose best.

DENIER:

The finer the microfiber denier, the more effective they are at picking up dust, pathogens, and dirt and absorbing the liquids involved in cleaning.

ADVANTEK®
MICRODENIER ▶ (0.53)
DENIER

STANDARD
MICROFIBER
DENIER ▶

(1.0)
DENIER

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MICROFIBER VS COTTON FIBERS

Microfiber outperforms cotton fibers in cleaning efficiency by trapping more dirt and bacteria. The microfiber's tiny, densely woven fibers capture and hold dirt, dust, and microscopic particles. In contrast, cotton fibers have a larger fiber denier, which provides less surface area for particles to stick to.

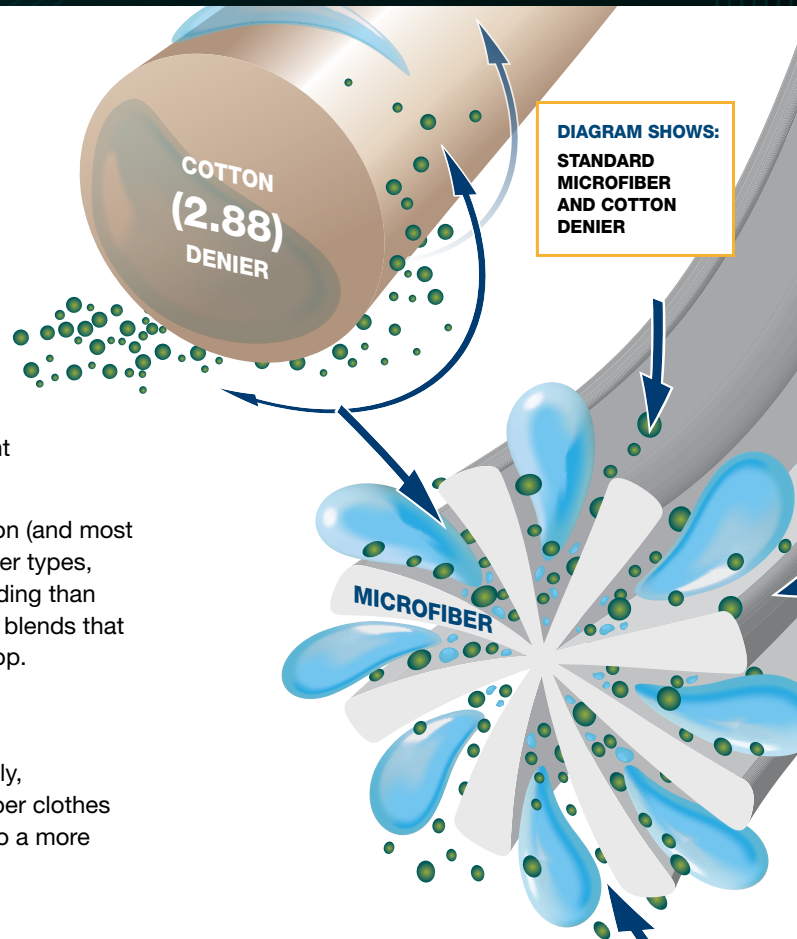
QUAT BINDING LOWERS EFFICACY

Quat binding is when the active ingredient in quat-based disinfectants (quaternary ammonium chloride) becomes drawn to and incorporated into the cleaning textile, reducing the amount available to disinfect surfaces.

While microfiber generally quats (holds chemistry) less than cotton (and most organic fibers), not all microfiber is created equal. Some microfiber types, particularly those with nylon content, are more prone to quat binding than others. Quality manufacturers provide microfiber or micro-denier blends that release quat and provide significant sq. footage coverage per mop.

DENIER LINKED TO WATER WASTE

Microfiber clothes and mops require less water to clean effectively, significantly reducing water consumption compared to natural fiber clothes and mops. Using less water and cleaning solutions contributes to a more eco-friendly and cost-effective cleaning routine.



ADVANTEX® FLOOR SOLUTION EFFICACY

Geerpres® is much more than a cleaning product supplier; we continually improve and create new clean systems to solve our customers' challenges and exceed their expectations.

Innovative cleaning solutions, it's what we do.

Our daily floor cleaning solution, the Advantex® Single-Use Microfiber Mop has been **tested and proven best-in-class** for non-quat binding, disinfection application, solution delivery, and reducing chemical utilization and waste. Our Advantex® microfiber has a microdenier of 0.53, blended with our "scrubbing" fiber to provide a superior cleaning solution that locks and lifts bioburden, dirt, and contaminants away for efficient and effective cleaning. Our Advantex® Single-Use Microfiber Mop provides efficacy rates of 99.9-99.99% on pathogen removal, which helps reduce the cross-contamination risks*.



*Supporting data available upon request

TÜV Rheinland® ASTM Testing Results on **ADVANTEX®** Microfiber Advantex® microfiber has a denier of 0.53, about half of one (1.0) denier. Our slightly larger "scrubbing" fiber has a denier of 1.107, just slightly more than one denier.