

ADVANTEX[®] VALIDATED MICROFIBER

Unlike other microfiber suppliers, Geerpres[®] has proven our Advantex[®] microfiber **exceeds** industry standards. Is your microfiber mop truly microfiber?

Geerpres[®] had its fiber tested by TÜV Rheinland[®], one of the world's leading material testing and inspection organizations, to independently confirm our microfiber denier.

Test Report #244158712a 002 | Sample Receiving Date: 07-16-2019 | Testing Period: 07-16-2019 to 07-23-2019

At Geerpres[®], our entire Advantex[®] single-use microfiber product line is systematically designed for all healthcare/clinical, terminal, cleanroom, food service, and hospitality applications. Our best-in-class single-use mops are manufactured with >70% recycled material and help eliminate the risk of cross-contamination with undisputable microfiber performance and superior solution delivery.

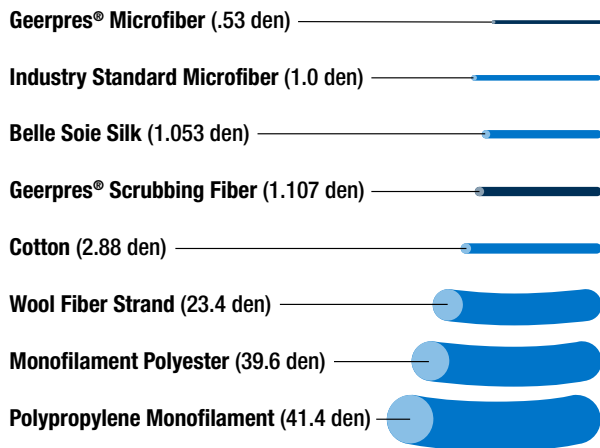
- A microfiber is a *synthetic fiber finer than one denier* or having a diameter of less than ten micrometers. <https://en.wikipedia.org/wiki/microfiber>.
- Denier is the weight of a fiber in grams per 9 kilometers (5.6 miles) of fiber. A fiber of one denier weighs one gram per a length of 9 kilometers. A direct measure of linear density. https://en.wikipedia.org/wiki/Units_of_textile_measurement



ADVANTEX[®] Microfiber ASTM Standards Testing Results

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.

Comparison chart indicates different fiber diameters:



Geerpres[®] confirmed these numbers by having its fiber tested by TÜV Rheinland[®], one of the world's leading material testing and inspection organizations, to independently confirm the denier of our fibers. TÜV Rheinland[®] is a 145-year-old global leader in independent ASTM inspection services. A worldwide presence with more than 20,000 employees and annual revenues of nearly EUR 2 billion. TÜV Rheinland[®] employs a global network of approved labs. <https://www.tuv.com/usa/en/>

There are two different primary fibers in the Advantex[®] mop. TÜV determined the denier of each using the American Society for Testing and Materials standard or “ASTM” Test Method D1907-07 for the Linear Density of Yarn. <https://www.astm.org/DATABASE.CART/HISTORICAL/D1907-07.htm>

In this test method, a number of these fibers of the same length are arranged in a bundle and weighed. The denier of the bundle is determined. In testing the Advantex[®] fibers, TÜV bundled 276 of the finer fibers (F) and 72 fibers of the slightly larger fibers. They determined the denier of the bundle and reported that number along with the number of fibers in the bundle. To determine the denier of a single fiber, one must divide the denier of the bundle by the number of fibers.

Referring to the TÜV report, one can thus determine the following deniers for the two different fibers:

ADVANTEX[®] MICROFIBER: 147.1 den/276F = 0.53 dpf

ADVANTEX[®] SCRUBBING FIBER: 76.9 den/72 = 1.107 dpf

Thus, the Advantex[®] microfiber has a dpf (denier per fiber) of 0.53, and the slightly larger scrubbing fiber has a denier per fiber of 1.107.