

**Strength matters.**

Depending on what you're using it for, cotton products can vary in strength. Yep, it is *that* versatile! But first, you must determine how strong your cotton needs to be. For example, your clothing. Your favorite t-shirt and best pair of jeans are both made from cotton, but they have distinctly different strength levels. The cotton itself plays a factor in this, as well as how it's processed.



**How is Cotton Strength Measured?**

Put your science-caps on and listen up! Cotton strength is measured in a unit called 'tex'. One tex is the equivalent weight (in grams) to 1,000 meters of fiber. Therefore, that means cotton strength is determined by how much force (again-in grams) is needed to break a one-tex bundle of fiber.

Photo credit: World Atlas

*According to Cotton Incorporated, this is how a tex is rated:*

VERY STRONG	32 AND ABOVE
STRONG	32-30
BASE	29-26
WEAK	25-21
VERY WEAK	20 AND BELOW

In the first stages of processing, having strong cotton is extremely important; breakage is obviously undesired. The good news is that cotton is inherently strong, because of its interlinking layers of tiny fibrils that make up a fiber. However, poor weather conditions and nutrient deficiency during growth can create imperfections.

Each bale of cotton grown in the US is tested by the USDA, then the data is collected and provided to the fiber purchaser.



## **The Right Wipe**

Cotton is rightfully known for its absorbency and softness, but it's secret superpower is its wet strength. Cotton fibers become stronger when wet-while viscose rayon loses strength and petroleum-based synthetic fibers are virtually nonabsorbent.

Think of cotton wipes. Whether you're wiping down a counter or using a baby wipe, a product that tears or shreds while in use is completely futile. Cotton wipes, however, have a greater tensile strength than rayon and pulp.

We know now that wipes are the ideal example for how strong cotton can be when wet.

However, it's just first on a long list! Consider the products that you or your loved ones may use on a daily basis: swabs, diapers, tampons, and pads. While softness and absorbency are primary concerns, these products would be ineffective without the proper strength.

### **Pure and Strong**

When engineering their 12-hour Purification Process, Barnhardt made sure their intensive cleaning procedure preserved the strength of each cotton fiber. So we have more good news for you: our Purification Process doesn't interfere with cotton strength *at all!*