



LEARN ABOUT WOOL



woolseye

WOOL FACT CHART

DURABILITY AND RESILIENCE

Wool fabrics resist wrinkles. Wool is the most resilient fiber because it has a natural crimp that helps it keep its shape. Wrinkles disappear when the garment or fabric is steamed. Good wool is very soft and resilient; poor wool is harsh. When buying a wool fabric, grasp a handful to determine its quality. If the fabric retains the wrinkles and feels stiff, this may indicate an inferior grade of recycled without feeling damp or clammy wool.

Wool is the weakest of all natural textile fibers. Wool fabric is strengthened by the use of ply yarns. A hard-twisted two-ply yarn may be regarded as an assurance of durability. Tightly twisted single yarns also make a strong fabric.

FIBER ABSORBENCY

- Wool is a hygroscopic fiber; it takes up moisture in vapor form.
- Tiny pores in the epicuticle make the fiber semi-permeable, allowing vapor to pass through to the heart of the fiber.
- Wool can easily absorb up to 30% of its weight in moisture

FAST FACTS

- Wool processing technology means many wool garments can be machine washed and tumbled dried without shrinkage.
- Hanging wool clothing in a steamy bathroom may remove wrinkles before wearing.
- Wool is flame resistant.
- Wool is not only biodegradable, it's also reusable.

TAKES DYE BEAUTIFULLY

Wool absorbs many different dyes deeply, uniformly and directly without the use of combining chemicals. Wool is an amphoteric, which means it reacts with both acids and bases; thus it accepts both acid and basic dyestuffs. Dyes penetrate into the inner medulla core of the fiber where a chemical reaction occurs making the color change permanent except under extreme and prolonged fading conditions.

CARE INSTRUCTIONS

Most garments have care instructions on the label



Hand wash only



Must be professionally dry cleaned



Machine wash on wool setting



Iron on wool setting



Do not bleach



Tumble dry on low heat setting

BENEFITS

- **Resists wrinkles**
wool springs back quickly
- **Resists soiling**
because the fiber is complex
- **Is durable**
multi-part fiber resists wear
- **Repels moisture**
fiber sheds water
- **Retains shape**
resilient fibers return to size
- **Resists flames**

CHEMICAL STRUCTURE

Wool is a natural protein fiber that grows from the follicles of the sheep's skin. It is like human hair in that it is composed of keratin-type protein. Chemically these proteins contain 5 elements: carbon, hydrogen, oxygen, nitrogen and sulfur. These 5 elements are combined into 19



Storing During Summer

Woolen clothing and blankets should be folded with acid-free tissue paper and stored in air-tight containers or vacuum bags. Wool coats should be thoroughly cleaned, dried, brushed and aired out before storing them in breathable, natural-cotton coat bags to avoid a moth getting into them during summer.

RESISTANCE TO COMPRESSION

Resistance-to-compression values are useful in assessing the suitability of wool for specific end uses. Resistance to compression (R to C) is the force per unit area required to compress a fixed mass of wool to a fixed volume. Resistance to compression is related to fiber diameter and the form and frequency of crimp. For instance, low and medium R to C wools tend to be softer, more lustrous, more susceptible to felting, easier to process and produce strong fabrics. On the other hand, high R to C wools have a harsher handle, are resistant to felting and are bulkier. Two resistance-to-compression studies conducted by Texas A&M University prove American wool is well-suited to produce the finest of fabrics as well as wool batting for the production of futons and other bedding materials. These studies confirmed that there is a good variety of wools available in the U.S. with low, medium and high resistance to compression. The majority of the wool finer than 28 micron in this test was analyzed as being in the middle resistance to compression range (53%). evaluated to be highly resistant to compression.

Have you ever wondered why your wool socks withstand foot stench longer than cotton or synthetic socks? Wool is naturally mildew and mold resistant because it is a natural moisture repellent, MEANING LESS STINK.

Fun Facts about wool

- Many of us associate wool with sheep, but other mammals — including alpacas, camels and goats — also produce fibers that can be twisted into yarn and then textiles.
- That itch from your warm winter woolies? Most likely it's sensitivity to thicker (and coarser) fiber diameter or fiber ends, not a wool allergy, which is practically unknown.
- In a seeming paradox, wool can absorb and repel water simultaneously.
- In short, wool hates liquid but loves vapor.



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www.woolseye.com