



## NONWOVEN TERMS

For the informed employee

### Rayon Fiber

Rayon fiber was invented in the late 1800's, but was not commercialized until 1905 by the Courtaulds company. It was first called viscose and later named rayon in 1924 however, it can still be called by either name. It was not produced as staple fiber until the 1930's.

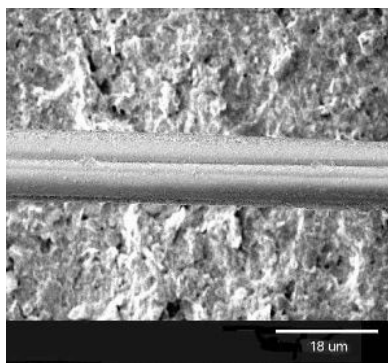
Rayon is made from cellulose which is obtained from wood. It is technically a synthetic fiber because it does not occur in nature, but it is made from a natural substance. It has similar properties of natural fibers.

- Readily absorbs water
- Can be made with a soft hand and is drapable
- Fiber or fabric made from rayon can be easily dyed
- High-wet-modulus rayon developed in the 1950's is strong when wet
- In the 1940's a high-tenacity (high strength) rayon was developed
- Rayon fiber naturally has a bright luster, but by adding pigments it can be obtained as dull or semi-dull.
- Biodegradable
- Does not shrink when heated
- Prolonged exposure to sunlight causes weakening of the rayon because of degradation of cellulose chains

In the nonwovens industry, much of the rayon used is 3 denier or less and often of short staple length. It is often blended with thermoplastic fibers (polyester or polypropylene) to obtain the best characteristics of both types of fibers. Rayon is put in products when a soft hand is required or the product needs to be absorbent. In the early days of the nonwoven industry, rayon was used in baby diapers and many other products because of the bonding methods used. However, when thermal bonding came into prominence, thermoplastic fibers replaced some of the uses of rayon.

Recently a type of rayon called Visil has found use in flame barrier fabric for mattresses. Visil rayon has silica ( a flame retardant) embedded in it during manufacture.

Microscopic photo of a single strand of rayon



**“There is so much good in the worst of us, and so much bad in the best of us, that it behooves all of us not to talk about the rest of us.”**

**Robert Lewis Stevenson**

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