

NATURAL FIBERS

Natural fibers are those that are in fiber form as they grow or develop and come from animal, plant or mineral resources.

Fibers can be spun, woven, knitted and/or dyed as part of the textile process. **Acknowledging the properties of natural fibers helps us understand** how they will perform both on and off the body.

Generally, **natural fibers breathe well** so they stay cool on the body. They also often feel soft and are aesthetically pleasing but can be more expensive due to the manufacturing costs of producing them.

COTTON

BEST PROPERTIES

- Low cost
- Cool to wear
- Good moisture absorption
- Strong (when wet & dry)

WORST PROPERTIES

- Inelastic (fabric creasing)
- Flammability
- Fabric can pill

LINEN

BEST PROPERTIES

- Good moisture absorption
- Strong (when wet & dry)
- Cool to wear
- Textured finish

WORST PROPERTIES

- Inelastic (fabric creasing)
- flammability
- Poor drape

SILK

BEST PROPERTIES

- Strength
- Smoothness
- Lustre

WORST PROPERTIES

- Expensive
- Sensitive to sunlight
- Yellows with perspiration

WOOL

BEST PROPERTIES

- Drape
- Elasticity & resilience
- Good moisture absorption

WORST PROPERTIES

- Expensive
- Can shrink when washed
- Can pill with abrasion

SYNTHETIC FIBERS

Synthetic or manmade fibers are made into fiber from chemical compounds produced in manufacturing facilities.

Fibers are made artificially so are almost always spun in order to produce a yarn. **Acknowledging the properties of synthetic fibers helps us understand** how they will perform both on and off the body.

As **synthetic fibers** are produced from chemical compounds, they are often very strong and durable but highly flammable. They don't breathe well (so become hot on the body) and are often less expensive to produce than natural fibers.

POLYESTER



BEST PROPERTIES

Low cost
Strength & durability
Easy-care
Good thermoplasticity

WORST PROPERTIES

Hot to wear
(fibers don't breath)
Develops static
Burns when melting

VISCOSE RAYON



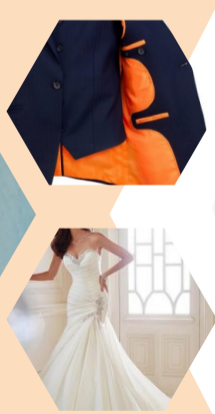
BEST PROPERTIES

Low cost
Moisture absorption
Good luster
Anti-static

WORST PROPERTIES

Poor durability
Low wet strength
Low wrinkle resistance
Flammability

ACETATE



BEST PROPERTIES

Soft handle & drape
Smoothness
Lustre
Low cost

WORST PROPERTIES

Low wrinkle resistance
Poor durability
Low strength

NYLON



BEST PROPERTIES

Strength & durability
Elasticity
Smoothness
Easy-care

WORST PROPERTIES

Poor absorption
Acid & sunlight sensitive
Burns when melting
(not for sleepwear)