

FIBER INFORMATION CHART

Fiber	Fiber Source	Advantages	Disadvantages	Uses
Cotton	Seed pod of cotton plant	<ol style="list-style-type: none"> 1. Strong 2. Durable 3. Serviceable 4. Dries quickly 5. Good wet strength 6. Dyes and prints readily 7. Easily accepts finishes 8. Absorbs moisture 	<ol style="list-style-type: none"> 1. Lacks elasticity when untreated 2. Wrinkles easily 3. Weakened by mildew 4. Shrinks easily 	<ol style="list-style-type: none"> 1. Outer clothing 2. Undergarments 3. Household items
Linum	Stalk of flax plant	<ol style="list-style-type: none"> 1. Strong 2. Durable 3. Dries quickly 4. Dyes well 5. Absorbs moisture 	<ol style="list-style-type: none"> 1. Wrinkles easily 2. Shrinks easily 3. Susceptible to mildew 	<ol style="list-style-type: none"> 1. Clothing 2. Household items
Burlap (jute)	Stalk of jute plant	<ol style="list-style-type: none"> 1. Inexpensive 	<ol style="list-style-type: none"> 1. Coarse 2. Poor wet strength 3. Brittle 4. Wrinkles easily 5. Natural odor 	<ol style="list-style-type: none"> 1. Gunny sacks 2. Wearing apparel (when lined) 3. Decorative household fabrics
Ramie	Stalk of China grass plant	<ol style="list-style-type: none"> 1. Natural luster 2. Dyes easily 3. Dries quickly 4. Absorbs moisture 5. Good wet strength 	<ol style="list-style-type: none"> 1. Expensive 	<ol style="list-style-type: none"> 1. Twine 2. Fishing net 3. Fire hoses 4. Upholstery fabric 5. Scarves
Wool	Sheep	<ol style="list-style-type: none"> 1. Warm 2. Comfortable 3. Resilient 4. Naturally absorbent 5. Dyes easily 6. Supple 7. Water repellent 8. Flame resistant 	<ol style="list-style-type: none"> 1. Sensitive to alkaline substances 2. Susceptible to moths and carpet beetles 3. Shrinks and mats easily 	<ol style="list-style-type: none"> 1. Clothing 2. Carpeting 3. Household items
Silk	Silkworm cocoons	<ol style="list-style-type: none"> 1. Luxurious 2. Elastic 3. Wrinkle resistant 4. Absorbent 5. Dyes easily 	<ol style="list-style-type: none"> 1. Yellows with age 2. Weakened by sunlight 3. Weakened by perspiration 4. Susceptible to insect damage 	<ol style="list-style-type: none"> 1. Clothing 2. Household items
Mohair	Angora goat	<ol style="list-style-type: none"> 1. Strong 2. Lustrous 	<ol style="list-style-type: none"> 1. Expensive 	<ol style="list-style-type: none"> 1. Upholstery 2. Men's suits 3. Clothing
Cashmere	Kashmir goat	<ol style="list-style-type: none"> 1. Warm 2. Luxurious 	<ol style="list-style-type: none"> 1. Requires special care 2. Sensitive to chemicals 3. Expensive 	<ol style="list-style-type: none"> 1. Dresses 2. Sweaters 3. Coats
Camel hair	Camels	<ol style="list-style-type: none"> 1. Warm 2. Luxurious 	<ol style="list-style-type: none"> 1. Expensive 	<ol style="list-style-type: none"> 1. Coats 2. Suits 3. Sweaters

Fiber	Fiber Base and Spinning Method	Advantages	Disadvantages	Uses
Rayon	<ol style="list-style-type: none"> 1. Cellulose sheets 2. Wet spinning method 	<ol style="list-style-type: none"> 1. Can be made flame retardant 2. Inexpensive 3. Dyes and prints easily 4. Absorbent 5. Easily accepts finishes 	<ol style="list-style-type: none"> 1. Poor wet strength 2. Low resiliency 3. Wrinkles easily 4. Weakened by light 	<ol style="list-style-type: none"> 1. Clothing 2. Household items
Acetate	<ol style="list-style-type: none"> 1. Wood pulp 2. Dry spinning method 	<ol style="list-style-type: none"> 1. Absorbent 2. Good colorfastness with some dyes 3. Bright and lustrous or dull 4. Luxurious feel 5. Good resiliency 6. Flame resistant 7. Good draping qualities 8. Inexpensive 	<ol style="list-style-type: none"> 1. Poor wet strength 2. Heat sensitive 3. Soluble in acetone 4. Generates static electricity 5. Subject to lumen fading 	<ol style="list-style-type: none"> 1. Luxurious, silky clothing 2. Draperies
Acrylic	<ol style="list-style-type: none"> 1. Acrylonitrile (natural gas, petroleum, limestone, air and water) 2. Wet or dry spinning method 	<ol style="list-style-type: none"> 1. Good strength 2. Good elasticity 3. High bulking power 4. Accepts heat setting 5. Good dimensional stability 	<ol style="list-style-type: none"> 1. Pilling 2. Holds oily stains 3. Low moisture absorption 	<ol style="list-style-type: none"> 1. Draperies 2. Carpets 3. Upholstery 4. Sweaters 5. Skirts 6. Suits 7. Blankets
Nylon	<ol style="list-style-type: none"> 1. Petroleum (air, water, and natural gas) 2. Melt spinning method 	<ol style="list-style-type: none"> 1. Strong 2. Quick drying 3. High wet strength 4. Resilient 5. Heat sensitive 6. Mildew and insect resistant 7. Accepts heat setting 	<ol style="list-style-type: none"> 1. Low moisture absorption 2. Low resistance to sunlight 3. Absorbs and holds body oils and perspiration 4. Picks up stray dyes and grays easily 	<ol style="list-style-type: none"> 1. Carpets 2. Hosiery 3. Underclothing 4. Lingerie 5. Knitted clothing 6. Women clothing 7. Swimwear 8. Upholstery
Polyester	<ol style="list-style-type: none"> 1. Melt spinning method 	<ol style="list-style-type: none"> 1. Wrinkle resistant 2. Good dimensional stability 3. Strong 4. Accepts heat setting 5. Moth and mildew resistant 	<ol style="list-style-type: none"> 1. Low moisture absorption 2. Discoloration of white 3. Holds oily stains 	<ol style="list-style-type: none"> 1. Carpets 2. Upholstery 3. Knitted clothing 4. Woven clothing
Spandex	<ol style="list-style-type: none"> 1. Wet or dry spinning method 	<ol style="list-style-type: none"> 1. Good elasticity 2. Sunlight resistant 3. Resists oils and perspiration better than rubber 4. Good holding power 	<ol style="list-style-type: none"> 1. Low tensile strength 2. Discoloration 	<ol style="list-style-type: none"> 1. Suits 2. Socks 3. Bathing suits 4. Household items 5. Support undergarments