

Fibre to Fabric

Fibre

Fibre is a natural or synthetic substance which is used to manufacture the other things.

Natural Fibre

Natural fibre is obtained from plants and animals. Fibres such as cotton, flax and jute are derived from plants. Fibres such as silk and wool are derived from animals.

Plant Fibres

The fibres which we get from plants are called plant fibres. Cotton, flax and jute are plant fibres.

Cotton: Cotton fibre is obtained from the cotton bolls of the cotton plant.

Flax: Flax fibre is soft, lustrous and flexible. It is stronger than cotton fibre but is less elastic. The finer grade of flax fibre is used for producing linen fabrics such as damasks, lace and sheeting. The coarser grades of flax fibre are used for manufacturing twine and rope. Flax fibre also forms the raw material for high quality paper industry.

Jute: Jute is a long, rough and shiny fibre. It is spun into coarse and strong threads. Jute is the cheapest natural fibre. It is composed of plant materials such as cellulose, lignin and pectin.

Animal Fibres

The fibres which we get from animals are called animal fibres. Wool and silk are animal fibres.

Silk: Silk is derived from cocoons of silkworm. Silkworms are reared for obtaining silk. This is known as sericulture. The various silk fabrics are crepe, satin, damask, taffeta, etc. Clothes made from silk fibre are soft, lustrous and comfortable to wear.

Wool: Wool is obtained by cutting the fleece from the body of some hairy animals such as sheep, goat, yak and camel. The main source of wool is sheep. Wool is used for making warm clothes.

Man Made Fibres

Man made fibres can be divided into two types namely regenerated fibres and synthetic fibres. Rayon and acetate are two regenerated fibres. Nylon, polyester, acrylic, etc are synthetic fibres.

Regenerated Fibres

The regenerated fibres are made from natural materials and the material is processed to form the fibre structure. Regenerated fibres are derived from the cellulose found in cotton and wood pulp.

Acetate: Acetate is a weak fibre, but fibres of different diameters can be produced. Acetate fibre produces luxurious fabrics that look similar to silk. The fabric made from this fibre is wrinkle free, pliable and soft with a good drape.

Rayon: Rayon is strong and extremely absorbent. Rayon fibre does not melt but burns at high temperature. Fabric made from rayon wrinkle easily and may stretch when wet and shrink when washed.

Synthetic Fibres

Synthetic fibres are completely made from chemicals. These fibres are stronger than natural or regenerated fibres. Both synthetic and regenerated acetate fibres are thermoplastic, which means they are softened by heat. Synthetic fibres melt at very high temperature.

Acrylic Fibre: Acrylic fibre or acrylonitrile is made from natural gas and petroleum. The fabric made from acrylic fibre is soft and luxurious. Acrylic fibre is very sensitive to heat. Modacrylic is used in pile fabrics such as fake fur and is flame resistant.

Nylon Fibre: Nylon fibre is a polyamide made from petroleum. Nylon is a strong fibre and has less weight than other commonly used fibre. It is elastic, resilient and sensitive to heat. Nylon fibre is smooth and non absorbent. It dries quickly.

Polyester Fibre: Polyester is a polymer produced from coal, air, water and petroleum products. This is a strong fibre and resistant to crease. Polyester fibres can be used for filling pillows and upholstery.

Fabric

Fabric is made by weaving or knitting threads or fibres together. Fabric is made from fibres in two steps. These two steps are spinning and weaving.