

Chapter 03

Synthetic Fibres and Plastics

Rayon:

Rayon is obtained by chemical modification of wood pulp. Wood pulp is a natural polymer. Hence, rayon cannot be called as synthetic fibres as it is obtained by the modification of cellulose. So we call rayon as semi-synthetic fibre.

Rayon can be woven into very fine threads like silk and dyed to give a different variety of colours.

Hence, rayon replaces silk in many times. Rayon is also called as artificial silk. Rayon is also cheaper than silk.

Nylon:

Nylon is obtained from coal water and air. This is the first fully synthesized fibre.

Nylon is well known for its waterproof fabrics as the fibres made up of nylon will not absorb water. Nylon fibres are strong, light, and durable. They are stronger than steel. This property of nylon is used in the preparation of ropes used for trekking and parachutes.

Polyester:

The monomer of polyester is an ester. The fabrics made up of polyester don't get wrinkled easily. This property is used in the preparation of different fabrics. It shows superiority to that of cotton in this property.

Terylene is an example of polyester used in the preparation of fabrics.

PET:

Full form of PET is Poly Ethylene Terephthalate. PET is used in the preparation of different plastics and articles.

- Many synthetic fibres are mixed.

Ex. Cotton mixed with polyester to give poly-cotton wool mixed with polyester gives poly wool.

- Acrylic fibres will be used for the preparation of winter ware fabrics as a substitute for natural wool.