

Recron[®] Staple Fibre is widely used today because of its amazing characteristics. Some of them are listed below.

Microscopic Appearance

Normally, it has a circular cross section with smooth and uniform longitudinal view.

Physical Characteristics

The quality of yarns from Recron[®] is superior to those from cotton, viscose, wool etc. in terms of strength, evenness values and imperfections.

The ratio of wet strength/elongation at break to dry strength/elongation at break is in agreement.

Initial Modulus

Recron[®] Staple Fibre has high resistance to extension deformation (0 to 5%) during mechanical processing.

Stiffness

Recron[®] Staple Fibre is stiffer (25 to 35 gms/denier) than natural fibres.

Toughness

Recron[®] Staple Fibre is tougher, has higher flex life, abrasion resistance and shock absorbency.

Elastic Recovery

Recron[®] recovers well from stretch, compression, bending and shear. Thereby causing lesser wrinkles and creases.

Creep Characteristics

Recron[®] Staple Fibre and yarns exhibit negligible creep.

Drying ability

At 20°C, 65% RH, Recron[®] has a low moisture regain of about 0.4%.

Gravity

Recron[®] Staple Fibre has a gravity of 1.52 as against 1.56 of cotton or VSF. This manifests as higher bulkiness of intermediate products like laps, sliver, roving etc. calling for higher compression for better compacting of the product.

Abrasion Resistance

Recron[®] Staple Fibre has better abrasion resistance than fibres from cotton, viscose or wool. Thereby giving fabrics better wear performance.

Electrical Conductivity

Recron[®] has poor electrical conductivity due to its low moisture regain; however it is prone to develop static by friction during processing.

Flammability

Flammability of Recron® Staple Fibre is low. The fibre tends to fuse and form a bead near the ignition temperature.

Effect of heat

Recron® Staple Fibre softens at a temperature of 235 to 240°C, which is higher than most synthetic fibres. The thermoplasticity of fibre ensures that fabrics do not shrink during usage. And permanent pleats and embossed effects can be done on fabrics at high temperature and pressure.

Chemical resistance

Recron® Staple Fibre is not affected by dilute acids, chemical solvents and detergents used in cleaning. It also shows high resistance to oxidizing and reducing agents.

Resistance to sunlight

Sunlight does not affect Recron® Staple Fibre.

Resistance to micro-organisms

Recron® Staple Fibre shows good resistance to insects, mildew and bacteria.



Reliance