



Education



5.0 Nylon: Video Transcript

Nylon is a synthetic polymer and is derived from crude oil. Like polyester, the molten polymer is extruded to produce continuous filaments in a process called spinning.

Nylon is a polyamide and by using different monomers we can produce nylons with different properties such as Nylon 6 and Nylon 6,6.

Both nylon 6 and nylon 6,6 are strong fibres with moderate elasticity. Nylon 6,6 has slightly higher elasticity than nylon 6 and therefore gives more flexible fabrics of softer handle.

Nylon is most often dyed using acid dyes as it is chemically similar to wool, both contain amino groups which, under acidic conditions become positively charged. The acid dyes are created to have a negative charge in these conditions and so are attracted to the positive charge on the nylon fibre. However, there are fewer amino groups in nylon than in wool, so there is a limit to the amount of dye that can become attached to the nylon fibre.