Nylon: Introduction

Nylon is a synthetic material. There are a number of different types of Nylon. The one described here is called Nylon 6.6, because it is made from two different monomers each of which has six carbon atoms. Variants such as Nylon 6.10 are also made and have slightly different properties. Other Nylons are made from a single type of monomer and are called Nylon 6, Nylon 11 etc.

Nylon is seen in fibres, to make tights for example, and also moulded to make small engineering components such as gear wheels.

Some background

Nylon was first produced in the laboratory by William Carothers, working for the DuPont company in the United States in 1935. Industrial production began soon after. Nylon was originally developed as a replacement for silk for stockings, but during the Second World War, it was used for parachutes, and Nylon stockings became part of the illegal black market. Carothers suffered from depression and took his own life in 1937 before Nylon had come onto the market.

Did you know?

The more carbon atoms in the monomers, the less water absorbent the Nylon.

Nylon is a tradename of the DuPont company.

Most clothes made of Nylon are labelled polyamide - its chemical name.

Making Nylon is a condensation polymerisation.