

CORN FIBRE – A NEW GENERATION BIO- TECH FIBRE

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Introduction

Corn fibre is a man-made fibre derived from renewable resources. It has emerged as an eco-friendly substitute for synthetic fabrics. The production and use of corn fibre create less pollution and fewer greenhouse gases and hence sustainable solutions. The corn fibre has all the advantages of synthetic materials and various properties of natural products such as cotton and wool.



Manufacture of corn fibre

The manufacturing of corn fibre involves the process of fermentation, distillation and polymerisation of simple plant sugar. First, the sugars are fermented. After fermentation, products are transformed into a high-performance polymer called polylactide, which can be spun or processed into corn fibre.

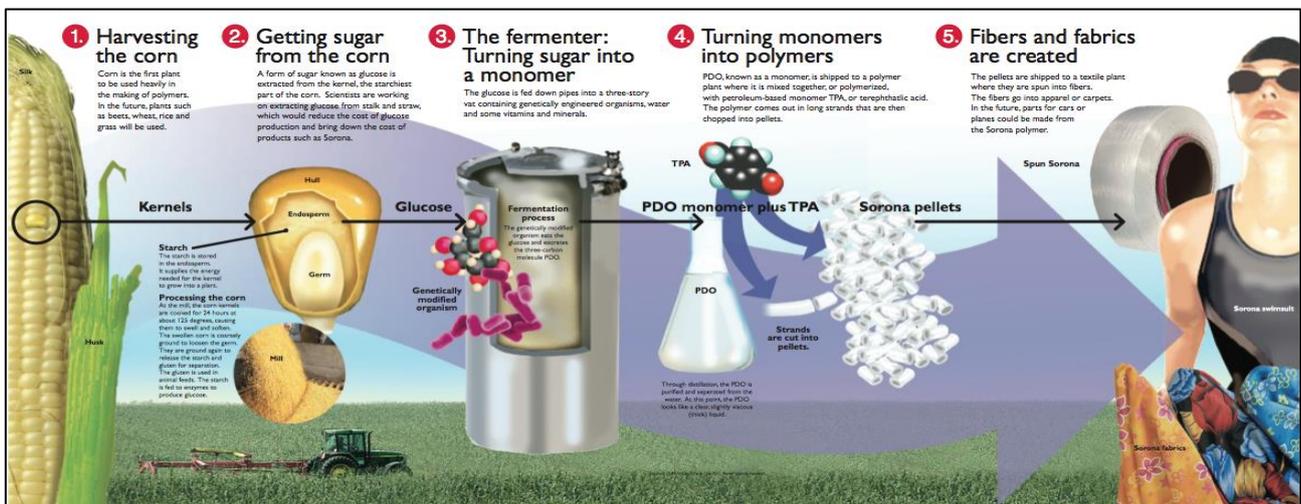


Fig 1.1: Process flow for the manufacturing of corn fibre



Properties

- It is a natural flame-retardant fibre.
- Has strength and provides comfort, softness and drape.
- It can be in spun and filament form and in a wide variety of counts.
- It has moisture management property and low odour retention.
- Corn fibre filaments have a subtle lustre.
- Garments in corn fibre have quick drying and show excellent after-wash appearance etc.
- It is completely biodegradable, compostable, burnable and recyclable.

Applications

- Corn fibre can be used in both with woven and non-woven fabrics.
- In Apparel - Sports, casual wear t-shirts, fleece, jeans, shirting's, trousers, duvet, jackets, jersey dressing, hosiery etc. are the more areas of application.
- Home textiles - Blankets, carpets, pillows, duvets, mattresses, draperies etc.
- Non-Woven - Used in cosmetics and diapers.
- Industrial applications: Geo textiles, agro textiles etc.

Summary

Corn fibre is currently used by a number of designers. They believe that through the use of corn fibre in their designs they can raise awareness for sustainable environments.

Wishing you all a great week ahead!

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