Fiber Types and Applications

Ingeo™ PLA fibers are available for both short and long staple process routes in bales of around 250 kg.

The fiber is crimped and available in bright and semidull forms, finished to give good processing performance through short and long staple spinning routes.

Dyeing can be with disperse or direct dyes and conventional processes and finishing technologies can be used, though strong alkali conditions must be avoided.
Ingeo PLA is the first melt-processable natural based fiber, with the PLA resin using readily available polyester type fiber manufacturing processes. Currently the fiber is produced in the USA using resin from the state-of-the-art NatureWorks plant in Blair, Nebraska, opened in 2002.

In addition to the basic properties shown below Ingeo PLA has a number of other outstanding features:

- Low flammability (LOI of 26) and very low smoke generation
- Excellent UV stability
- High resilience
- Excellent wicking, moisture management and comfort properties
- Compostable under appropriate conditions
- Low odor retention

**Fiber Properties**

- Fiber dtex: 1.5
- Fiber Tenacity: 32-36 cN/tex
- Fiber Elongation: 50 - 60%
- Moisture Content: 0.4 - 0.6%
- Crimp/10cm: 30 - 35
- Cross Section: Round
- Surface: Smooth
- Density: 1.25 g/cm³
- Melt Point: 170°C