



## 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.

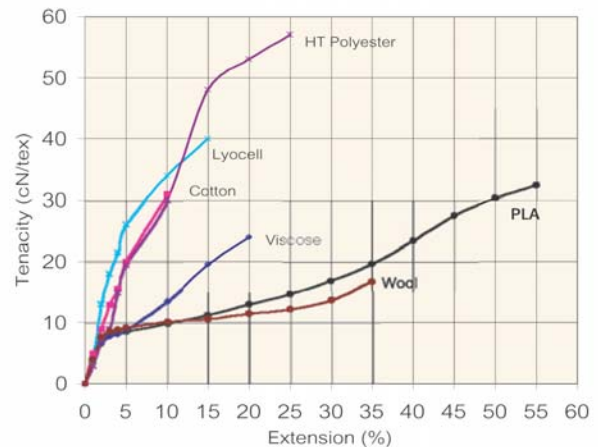
In addition to the basic properties shown below Ingeo PLA has a number of other outstanding features:

- 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/cm <sup>3</sup>
Melt Point	170° C

Ingeo PLA  
1.5dtex 38mm  
Fiber Stress Strain Data



## Ingeo Worldwide Offices

Amsterdam, Hong Kong, London,  
Milan, Minneapolis, New York and Tokyo



[www.ingeofibers.com](http://www.ingeofibers.com)

## Contact

1 800 66 INGEO (USA only)  
+1 989 633 1746 (Worldwide)

Ingeo and the EcoPLA design are trademarks of NatureWorks LLC © 2005  
15305 Minnetonka Blvd., Minnetonka MN 55345  
GSFIB10090305V2

No freedom from any patent of NatureWorks LLC or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, NatureWorks customers are responsible for determining whether the products and information in this document are appropriate for the customer's use and for ensuring that the customer's workplace and disposal practices are in compliance with applicable laws and regulations. NatureWorks assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN: ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.