wipes commercial product information

Technical Bulletin 110804

A Soft, Strong Wipe from 100% Natural Resources

Consumers may now choose to buy wet wipes—one of the fastest growing disposable products on the market today—that are made from 100 percent natural, renewable resources.

Consumers will choose this natural wipe because it *performs* as good, or better, than other wipe products on the market today. The consumer will also *feel* good about their choice of this intimate product because it comes from nature and contributes to a better future for our children and our world.

Why? The typical spunlace wet wipe contains 1/3 – 1/2 polyester fibers from oil, while the remainder is viscose fiber, derived from tree pulp. Ingeo™ fiber is the world's first man-made fiber derived from 100 percent annually renewable resources, such as corn. Ingeo fibers meet or exceed the performance requirements of traditional petroleum-based fibers and therefore can replace polyester entirely in wipes.

The result is a soft wipe—with strength and loft of a spunlace construction. And because the wipes are made from annually renewable resources, they result in less oil consumption and generate less greenhouse gas emissions.

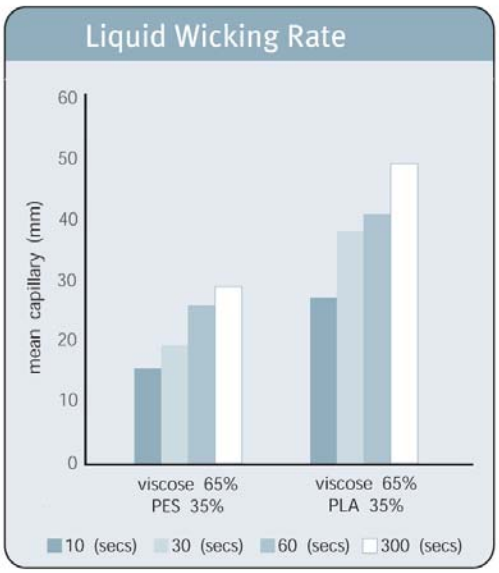
Ingeo fibers represent the start of the journey toward sustainability, where it is possible to meet the world's needs for fibers while limiting the impact on the earth's natural resources. Unlike other synthetics, the raw material used to create Ingeo fibers can be re-grown every year. At the end of their useful life, products made from Ingeo fiber could fully degrade in industrial compost systems, where they are available. Where composting is not an option, Ingeo fiber is compatible with standard waste disposal systems including landfill and incineration.

A better wipe and a better future: a product *different* than any other offered in this market today. The result will be increased sales and customer loyalty.

In addition to wipes, Ingeo fibers are ideally suited for use in apparel, carpet and fiberfill consumer products. Currently, more than 100 leading brands and manufacturers are introducing new products made from Ingeo fiber. Products made from Ingeo fibers are available today in stores across the United States, Europe and Japan.

Natural Performance

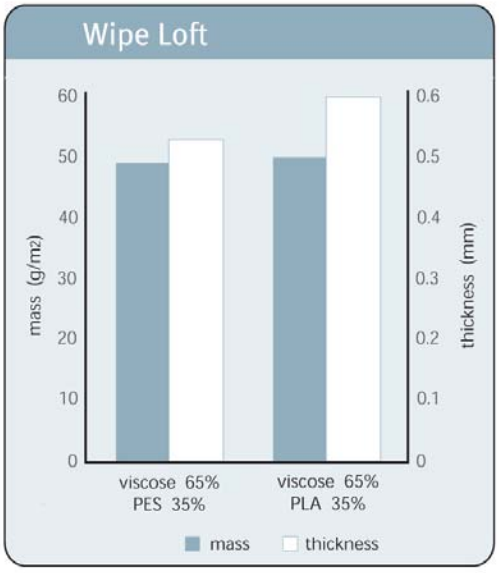
Derived entirely from annually renewable resources, Ingeo fibers combine the performance advantages of both natural and synthetic fibers. Testing has shown that Ingeo fibers result in a spunlace wet wipe that performs as good or better than polyester-based products. The following tests compare a 50 grm/sq meters wipe fabric produced with 35 percent Ingeo fiber and 65 percent viscose versus a product with 35 percent polyester and 65 percent viscose. This is a construction typically found on the market today, which meets the needs of finished goods packers and consumers.



test method: ISO EN 9073-6 (EDANA method 10.3-99)

test: measures the rate of capillary rise in a specimen strip when suspended in a test liquid.

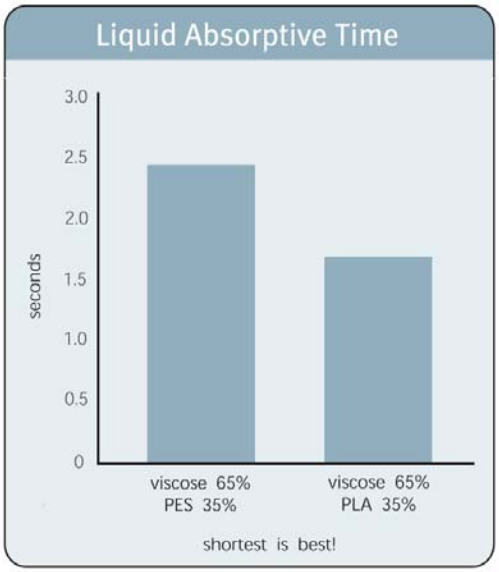
result: Ingeo fibers showed superior performance in their wicking rate.



test method: ISO EN 9073-1 and ISO 9703-2

test: the mass and thickness of the fabric wipes were measured.

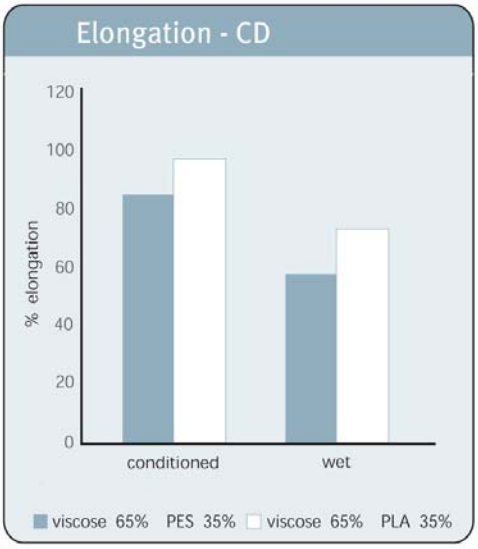
result: the wipes with the Ingeo fibers yielded a greater thickness (mm) for a similar mass (g/m2).

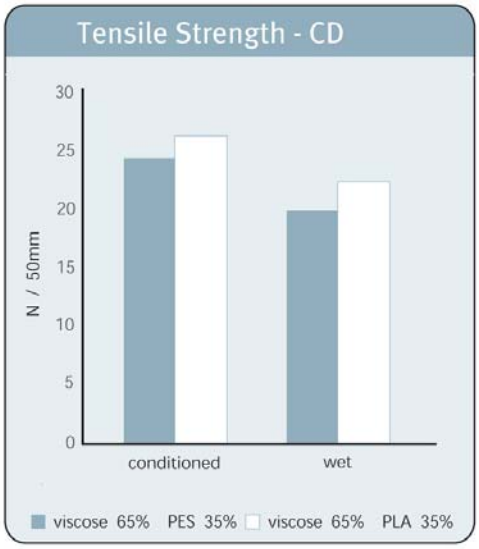


test method: ISO EN 9073-6 (EDANA method 10.3-99)

test: measures the time required for the completed wetting of a specimen strip.

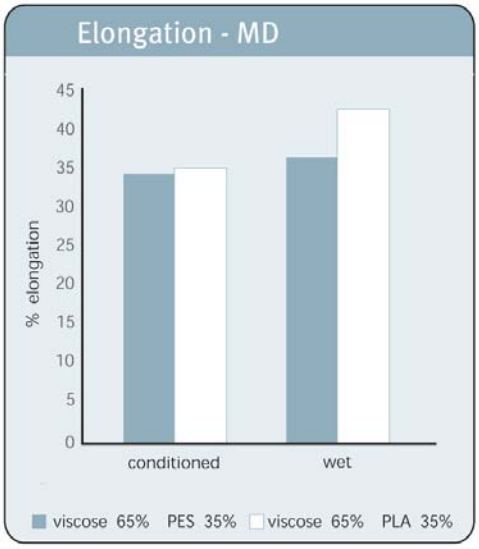
result: the Ingeo fibers demonstrated a faster absorbency time.

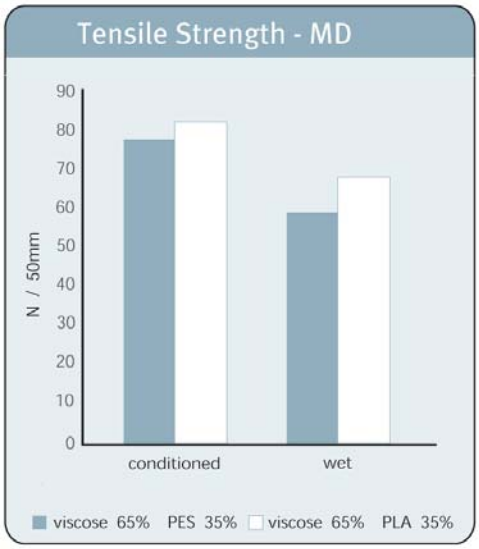




test method: ISO 9073-3 1989

test: an increasing force was applied to each specimen until break occurred using a Testometric C.R.E. machine in the cross machine direction.
result: Ingeo fibers demonstrated greater elongation and tensile strength when compared to the incumbent material.





test method: ISO 9073-3 1989

test: an increasing force was applied to each specimen until break occurred using a Testometric C.R.E. machine in the machine direction.
result: Ingeo fibers demonstrated greater elongation and tensile strength when compared to the incumbent material.

FTC Designation

The Federal Trade Commission (FTC) has designated PLA as a new fiber generic. To receive the generic classification, NatureWorks LLC had to show properties and chemical composition that is radically different from other fibers; what commercial use is foreseen; and that the new generic is of importance to the public. PLA joined cotton, wool, silk, nylon and polyester as a recognized fiber category. PLA is the first generic fiber of the new century to earn FTC approval and gain acceptance from the commission.

Man-made Fibers from Plants, Not Oil

We start with an abundant, natural raw material like corn that can easily and efficiently be reproduced each year.

This corn is put through a simple process to make plant sugars. The sugars are fermented in a process similar to making yogurt. Then the fermentation products are transformed into a high-performance polymer called polylactide, which is branded NatureWorks® PLA. Ingeo fiber is extruded from this polymer.

The production and use of Ingeo fiber means less greenhouse gases are added to the atmosphere. Greenhouse gases are the chief contributor to global climate change. Compostability and chemical recyclability mean that under the right conditions and with the right handling, the complete life cycle of production, consumption, disposal and reuse is neatly closed.

Ingeo Worldwide Offices
Amsterdam, Hong Kong, London,
Milan, Minneapolis, New York and Tokyo

NatureWorks LLC

www.ingeofibers.com

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