# **GREEN INSIGHT**

## **FiberVisions**



Who We Are: FiberVisions currently offers CoolVisions® dyeable PP staple fiber for ring spinning in 1.2 and 1.5 dpf and for Murata Air Jet Spinning in 1.2 dpf. The fibers are currently manufactured in the U.S. with future plans to produce the product in China. FiberVisions has five manufacturing facilities across four continents (North America, South America, Europe, and Asia).

CoolVisions® offers manufacturers lean production, faster cycle times and better margins. A wider range of colors including seasonal fashion colors are now available without having to purchase the large minimums required for specialty colors in solution-dyed product. Dyeable greige goods will facilitate significant improvement in production times and speed to market.

CoolVisions® primary markets are athletic and outdoor apparel, but interest is varied including such markets as thermal underwear, fashion apparel, hats, mattress toppers, travel pillows and blankets.

The first commercial program was introduced by SportHill in their 3SP performance pullovers and jackets targeted at elite runners. New program development is now underway by some of the world's most prestigious outdoor/activewear brands.

#### TO LEARN MORE:

www.cool-visions.com

olypropylene is enjoying a revival in the apparel market with today's increased interest in "green" products and the advent of dyeability. Leading the way in this renaissance is CoolVisions®, a revolutionary dyeable polypropylene fiber from FiberVisions, one of the world's chief producers of polypropylene staple fibers. This multi-functional, eco-minded product is now being selected by top brands looking to provide consumers with stylish garments that afford a roster of sustainability and performance features. With CoolVisions® that's an all-in-one offer.

#### **Extraordinary Eco**

CoolVisions® has a strong sustainability platform. To begin, polypropylene has the best carbon footprint in the category of synthetics. Of all the major synthetic fibers, polyolefins are the only ones which begin as a co-product, meaning lower greenhouse gas emissions and lower energy use than other fiber resins.

The fiber manufacturing process of polypropylene has a low impact on the environment with no toxic waste, low emissions, and no fluorocarbons, or halogens. The environmental impact is also seen at the consumer level, with reduced energy use for drying of garments and high potential for recycling.

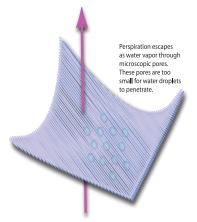
"Polyolefin fibers are clean burning and have a very high calorific value when incinerated as part of a mixed waste stream, providing a high energy value for the amount of CO2 emitted during incineration," according to Dr. Prashant Desai, Director Business Technology.

Susan McGreal, Sales &Marketing Director for CoolVisions® points out, however, that today's sustainability story has to resonate with customers. "It's not enough for a product just to be "green." Performance and aesthetics are of utmost importance, too, and that's what you get with CoolVisions®."

#### **New & Unique**

In addition to a dedicated green story, CoolVisions® dyeable polypropylene offers a unique advantage in today's challenging

CoolVisions® Dyeable Polypropylene Fabric



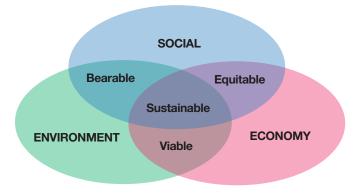
business environment addressing the industry's desire for differentiation, performance and superior quality.

Unlike polypropylenes of the past, CoolVisions® is dyeable and features a vast array of inherent benefits and properties. Traditionally, polypropylene lacked support in textile apparel applications because the fibers could not be dyed. Instead, the color had to be imparted at the fiber extrusion step through mass coloration or solution dyeing. While this offered excellent colorfastness, there were significant disadvantages. For example, introducing new colors involved a somewhat complex color-matching

step and secondly, there was an absence of greige goods to be dyed. Consequently, relatively large lots of fiber had to be made for every



### FiberVisions' Sustainability Stewardship



new color, and the time required to go from a new color concept to the final fabric or garment could be long.

FiberVisions, however, changed the course of polypropylene use in contemporary apparel with the development of CoolVisions®. The fiber can be dyed using conventional disperse dyes in a manner similar to that used for polyester fibers. Further, polypropylene's natural attributes such as light weight, easy care, moisture management, durability and breathability are hallmarks of CoolVisions®.

According to Jim Pepper, Global Business Director Industrial/ Textiles, "CoolVisions® has great chemical and stain resistance compared with polyester and other fibers, and is much lighter, thereby providing better coverage with less garment weight and fiber content."

Comfortable with cottony softness, garments made with CoolVisions® dyeable polypropylene are easy care with built-in stain resistance. Indeed, CoolVisions® combines the performance of synthetic fibers with the aesthetic of natural fibers.

CoolVisions® dyeable polypropylene fibers provide outstanding thermal insulation fibers and have excellent toughness and abrasion resistance making this revolutionary fiber perfect for outdoor activities. CoolVisions® outperforms all other fibers in low moisture absorption, providing the fastest drying garments in the industry.

With all these attractive features it's not surprising then that global brands such as Terramar and The North Face are using CoolVisions® in upcoming collections. Terramar baselayer will be in stores this month. The North Face flannel Tekware shirts for men and women will be introduced at Outdoor Retailer Winter Market in January and will be in stores for Fall 2010. The North Face garments are blends of CoolVisions® and cotton.

"Polypropylene baselayer is an essential in our customers' performance thermal assortment, and now that we have the CoolVisions® product we can easily give our active end-user top-notch, "next-to-skin" function with soft "cottony" hand comfort – far from the scratchy, "plastic-y" type feel of polypropylene in the past," says Russell Pitman, VP sales & marketing, Terramar Sports.

Softness, along with several other features appeals to The North Face. "We are impressed with CoolVisions" combination of thermal insulation, moisture management and durability in a lightweight fabric. The dyeable polypropylene lets us offer rich color combinations in a unique, technical product. The fabric we have chosen blends the comfort and breathability of cotton with the technical benefits of the CoolVisions® fiber," says Peter Hernandez, Senior Product Manager, Outdoor Sportswear for The North Face.

#### **Innovations Continue**

FiberVisions continues to focus on taking development forward. For example, the company launched CoolVisions® Dark at Outdoor Retailer Summer Market. The new product delivers darker, richer darks and improved wash fastness for dark colors.

In addition, recent printing trials using digital printing were successful. Not only are detailed camo prints possible but so too nearly any other print using this low heat technology. This process allows for shorter runs and customization.

A variety of additions and upgrades are also now available including the option for anti-microbial finishes and fluorescent colors. The company also has a new lower pill product under development.

"We see a very competitive marketplace and it's one where innovation is very important. That's a focus we have at FiberVisions: to create value through innovation," states Pepper.

## **Dyeing Characteristics & Benefits**

he ability to dye fabrics results in many benefits over the use of fabrics made with traditional solution dyed fibers. Some of the value-chain benefits include the ability to store greige goods, match colors quickly, produce smaller lot volumes and serve niche or fashion related color lines, respond rapidly to market demand, and offer a wider range of colors

without greatly increasing inventory costs. There are added financial benefits from reduced working capital needs and production times. Styling benefits include reduction in barré found in solution-dyed garments and the ability to print with dye inks rather than pigment inks. Dyeprinted fabrics exhibit a softer hand and better colorfastness than pigment- printed fabrics. CoolVisions® fibers also have been engineered to have an inherently soft hand and cotton touch not found in traditional polypropylene fibers.