



Q

Home > Topics > Sustainability

JUNE 12, 2020 11:43AM ET

How Erca Is Upcycling Used Cooking Oil Into Textile Auxiliaries

By Sarah Jones



CREDIT: Shutterstock

One week until Sourcing Journal's Virtual Sourcing Summit on Oct 14 & 15. Be in "the room" with Nordstrom, TJX, Target, Faryl Robin, Stitch Fix, Deckers, Macy's, Adidas, Carrefour, Madewell, Gap, Walmart, Belk, Zumiez, Perry Ellis and more.

JOIN US

As the textile business strives to achieve greater circularity, Italian chemical group Erca is innovating

to reduce the use of virgin resources in the dyeing process.

RELATED ARTICLES

- Alibaba.com, ShipStation Launch Integration for B2B E-commerce
- 60% Cite Sustainability as a Top-Two Priority, Cotton Trust Survey Shows

"The world economy consumes 93 billion tons of raw materials every year; this includes minerals, fossil fuels, metal and biomass, and only 9 percent of these resources are reused," said Fabio Locatelli, business unit manager of textiles at Erca. "This level of consumption has tripled since 1970 and is set to double by 2050. To maintain this current pace of production and lifestyle we would need another planet Earth. We have realized that just doing better what we are already doing is not enough to contribute to reducing the consumption of fresh resources and this, in fact, is what drives us to look for sustainable solutions."

Erca's Revecol line of textile auxiliaries is produced using recycled vegetable oil, which is collected from homes and restaurants. And cooking oil is in large supply. In Italy alone, 1.4 million tons of oil are consumed annually, creating 260,000 tons of used cooking oil.

The Revecol line can be used in the dyeing process for virgin or recycled polyester to level, diffuse and disperse dyes. Erca has positioned Revecol as the "missing piece" for the production of recycled textiles, allowing circularity at an additional step of the supply chain.

Developing the vegetable oil-derived auxiliaries came with its own set of challenges, including a costly investment, as Erca was creating something new while simultaneously ensuring that the chemicals met certification standards such as REACH. With Revecol, Erca became the first chemical company to earn the Global Recycle Standard Certificate of Compliance in 2019.

The launch of Revecol follows Erca's earlier release of a ReactEVO washing process for reactive dyes that cut the processing time by 20 percent, halve water consumption and save 70 percent of energy usage.

Erca has plans to expand the Revecol line to other products in the coming months, such as detergents, softeners and emulsifiers. Each additional product leveraging this upcycling technology will take about six to eight months for testing, and another six months for certification. The group is also looking into creating auxiliaries from other recycled materials.

Erca is intently seeking input from certification bodies and brands. According to Locatelli, interest from brand-side clients will ultimately influence broader sustainable chemical development and investment.

"Today, in most cases, the user of chemical products does not change unless expressly indicated by stricter rules and when 'suggested' by those who provide them with the work, precisely the brands," Locatelli said. "In this way, I am sure in a short time many more producers will feel involved and

influenced by the need to make a more sustainable choice and the use of recycled materials will become increasingly common."

Sourcing Journal's Sustaining Voices celebrates the efforts the apparel industry is making toward securing a more environmentally responsible future through creative innovations, scalable solutions and forward-thinking initiatives that are spinning intent into action.

See more of our Sustaining Voices honorees and their stories, here.

