

Dallas' Celanese and Under Armour team up for an Earth-friendly spandex alternative

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Credit: Képaréna 2014TM from Pexels

Dallas-based chemical and material manufacturing company Celanese is teaming up with athletic apparel brand Under Armour to create a new,



recycling-friendly, spandex-like fiber.

Celanese plans on making the material, which it calls Neolast, available to the wider clothing industry.

The <u>partnership</u> represents continued pivots in both firms: Celanese back into fabrics and Under Armour towards sustainability-centered business. But the recycling methods needed for Neolast's impact to be felt are still in development.

Spandex, the material traditionally used for stretchy clothing, has several long-known environmental issues. The fabric never biodegrades and its production exposes workers to potentially <u>hazardous materials</u>.

Neolast, according to Celanese, does not require hazardous chemicals in its <u>production process</u>, thanks to the manufacturer's new and proprietary "solvent-free melt extrusion process."

This updated <u>chemical composition</u> also allows for recyclability.

"If you're doing chemical recycling, and you throw some spandex in there, nothing in that batch will be able to be broken down and reproduced," said Brian Bianco, president of the Celanese Foundation and director of external communication. "[Neolast] is made differently. It does have that capability."

Bianco said the company has been careful in its description of the product as sustainability-enabling, and not itself a fully recyclable product.

"The people who take the product from us and create the end-use apparel can then figure out, 'Okay, you've taken this huge obstacle out of the path. How do we keep accelerating this and make something that is



fully recyclable?" Bianco said.

Under Armour is trying to answer just that through circular economies, systems in which consumers pass on their goods to the next user in line rather than discarding them.

"NEOLAST will help support our sustainability goal of eliminating spandex from 75% of our products by 2030," said Anna Harry, global communication lead at Under Armour.

Celanese's current foray into fabric began with a November 2022 acquisition. Bianco explained that Celanese acquired a large piece of DuPont's mobility and materials business, where Neolast was already under development.

"We just picked it up and got behind it," said Bianco.

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