

2000 Americhem Way | Cuyahoga Falls, OH 44221 | **p:** 330.929.4213 | **f:** 330.929.4144 americhem.com

Today, more than ever, sustainability in the polymers industry is becoming a topic that we all experience daily. There are so many sides to sustainability, and we most often think about what happens before a product reaches the hands of the consumer. But what happens after the consumer is finished? After all, an estimated 85% of textiles end up in landfills in the United States each year.

Americhem's Fiber Development and Commercial teams (including Roger Threadgill, Eric Lann, Dwayne Morefield, Roxanne Hiott, Joel Foster, Ken Jepson, Carmen Plummer, Debbi Rowell, Kelly Wootten, Justin Fetzer, Marco Ramirez, and Tom Disseler) are busy creating new technologies to speed up how fabrics break down in landfills. Importantly, these innovations won't adversely affect the performance of the fabrics while they are still in use. And furthermore, this technology does not adversely affect a product's ability to be recycled.

This technology functions by enhancing the natural biodegradation processes in landfill settings by increasing the rate of molecular breakdown. It's particularly beneficial for landfills that capture landfill gas, since methane, a potent greenhouse gas, is released during the breakdown of plastics. By accelerating this process and capturing the gas, this technology offers an environmentally friendly solution.

The Development Team has formulated this biodegradation additive with existing custom colors and other functional additive technologies to create higher value products that can be tailored to fit multiple applications. Samples have been spun to create different types of textiles including carpet denier fiber, apparel, and spun bond non-wovens.

Americhem is in the process of testing these environmentally conscious textiles to evaluate the useful performance and increased rate of landfill degradation versus conventional textiles. We thank the Fiber Development and Commercial teams that are involved in this project for their ongoing commitment to sustainability and for helping Americhem achieve a greater positive impact on the environment.