

Biodegradable Geobailers

- Same reliable products
- Faster breakdown in the environment after they are discarded
- Supports less accumulation in landfills
- Same low price



An engineered additive helps Geotech Geobailers to be more biodegradable than typical plastic products (according to additive tests performed under ASTM D5511 test method).

This material will not adversely affect the quality of the products or the applications for which Geobailers are used. Geobailers will operate in the exact way that they have in the past. They will be just as dependable, watertight, and long-lasting. The good news is that after you have finished using them, they break down more quickly in a landfill, becoming food in a microbe-rich environment, similar to compost.

How Does It Work?

The additive is found in crude oil which is burned out through the cracking process and synthesized with nutrients and then grafted to a plastic polymer chain. Adding this material to plastics attracts microbes to the product once it is next to soil, allowing them to control their pH level and become quorum sensing and colonize on the surface of the plastic. Once the microbes colonize on the plastic, they secrete acids which break down the entire polymer chain. Microbes are interested in the carbon backbone of the polymer chain which they use as an energy source.

The microbe-rich environment helps to break down the plastic because the additive has helped the environment to transform the plastic into an attractive food source for soil microbes, which quickly digest it. The byproducts are humus, methane and carbon dioxide, similar to byproducts of other organic materials. As the plastics breaks down, they are converted to useful energy.

