



**ENHANCED  
BIODEGRADATION**

*Pads made using 100% recycled PET plastic and specially formulated to rapidly biodegrade once discarded into an active landfill.*



## Environmentally Innovative Floor Pads with **Enhanced Biodegradation\***

### Giving a new meaning to “Green Cleaning”

Given the complexity and chemical composition of the components used in manufacturing floor pads, recycling has not been considered a feasible option. As a result, millions of floor pads are discarded into landfills each year, where it can take hundreds or possibly thousands of years to degrade into their basic organic and inorganic components.

Our manufacturer has proven itself as a leader in “green” manufacturing and a true pioneer in Jan/San markets worldwide. Our goal is to produce products that perform to the highest standards while leaving the smallest possible impact on the environment. The fibers in the floor pads we manufacture are made using 100% recycled PET plastic. We only utilize water-based resins in our binding process. Completing the cycle in 2014, we introduced an innovative floor pad technology called Full Cycle®. These floor pads are specially formulated to biodegrade in a fraction of the time once discarded into a landfill, compared to conventional pads.

So what does this mean for the end user and our environment? Consumers have access to high quality products with long lasting performance—while reducing mankind’s impact on the environment.

- **Same core floor pad construction—now specially formulated to rapidly biodegrade once discarded into an active landfill.**
- **ASTM D5511 tests show Full Cycle® floor pads biodegraded up to 92.5% in 616 days—compared to 16.4% on America’s standard floor pad (see Figure 3).**
- **Leaves no toxins or toxic remnants in the environment.**
- **Methane is created during the biodegradation process which can be captured and converted into energy where facilities exist.**



Full Cycle® Products are certified by Green Seal™ for Environmental Innovation based on faster biodegradation in landfill conditions and 100% recycled content/natural fiber. [GreenSeal.org/GS20](http://GreenSeal.org/GS20)

\*See Figures 1 and 2.



**Figure 1. (Profile View)**

Samples A and B shown above were both taken from the same Full Cycle® floor pad. While Sample A was left untouched, Sample B was placed in an ASTM D5511 simulated landfill test for 290 days. Note the significant mass reduction via enhanced biodegradation in Sample B. *Photos courtesy of Eden Labs LLC.*



**Figure 2. (Overhead View)**

## The Science Behind the State-of-the-Art

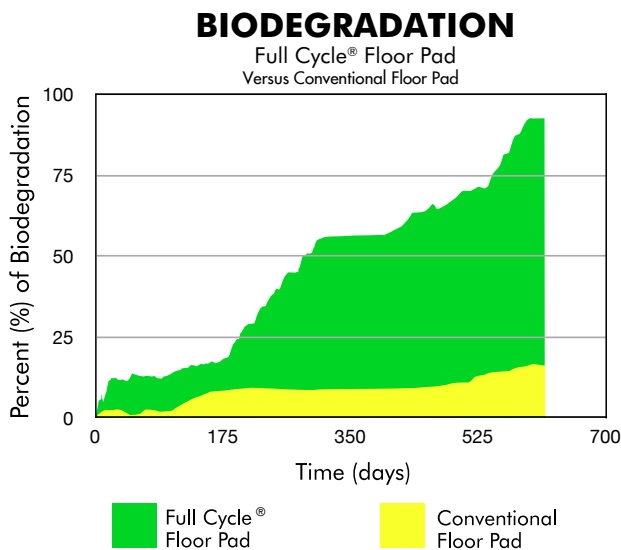
Biodegradation is essentially the process by which organic materials are broken down into other compounds via the action of naturally occurring microorganisms. The latex polymers and synthetic fibers used in manufacturing floor pads do not exist naturally and most are created to be extremely stable; so much so, in fact, that they will last in the environment for hundreds, if not thousands of years. With Full Cycle's new biotechnology, the biodegradation of our floor pads is enhanced through a series of new formulations that will begin the rapid biodegradation process only after the product is disposed of in an active microbial environment, such as a landfill.

So, what actually occurs to speed up the biodegradation of our floor pads after they are disposed of in an active landfill? The biodegradation process occurs only in an anaerobic environment when certain microorganisms are attracted to the floor pad surface and begin to colonize. They start to digest

and break down the polymers in the floor pad structure. This causes the floor pad to biodegrade at a much faster rate when compared to conventional floor pads, as shown in **Figure 3**. In addition to significantly increasing the rate of biodegradation, the by-products created during this process are methane (which can be captured and converted into energy where facilities exist), carbon dioxide and inert humus (enriches the soil).

## Full Cycle® Results

With Americo floor pads, our customers don't have to sacrifice quality or product performance to leave a green footprint. Being good stewards of the environment is simply our corporate responsibility—and it's what sets us apart from other manufacturers. Learn more about Full Cycle® and all the ways we're living GREEN for a cleaner world at [www.FullCycle.com](http://www.FullCycle.com).



**Figure 3.**

ASTM D5511 testing shows 92.5% biodegradation in 616 days of a Full Cycle® floor pad as compared to 16.4% on our conventional pads. The ASTM D5511 test is a method that evaluates the biodegradability of plastic in anaerobic, or oxygen-less, conditions. These laboratory tests often show faster results than actual landfill conditions. The actual rate of biodegradation of Full Cycle® pads, as well as the rate of all plastic materials in landfills, will be slower and will vary, dependent upon actual landfill conditions.

For more information regarding Full Cycle® pads, visit [www.FullCyclePads.com](http://www.FullCyclePads.com).

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**California Notice:** California law prohibits the sale of plastic packaging and plastic products that are labeled with the terms 'biodegradable', 'degradable', or 'decomposable', or any form of those terms, or that imply in any way that the item will break down, biodegrade, or decompose in a landfill or other environment. These restrictions apply to all sales in or into the State of California, including such sales over the Internet.