

HOW CERTIFIED COMPOSTABLE PRODUCTS BREAK DOWN

IN REAL-WORLD COMPOSTING ENVIRONMENTS

WHAT ARE CERTIFIED COMPOSTABLE PRODUCTS?

Certified compostable products are science-backed, rigorously tested alternatives to non-recyclable food-associated products and packaging. They are designed and proven to break down safely in commercial composting facilities, alongside food scraps.

Traditional plastics cannot be composted and need to be screened out. In the process, they often fragment into persistent microplastics that remain in the environment.

Certified compostable products meet strict criteria for biodegradability, which measures how organic carbon is consumed as a food source by microorganisms. This means materials certified as compostable, do not leave behind persistent microplastics that accumulate in nature.



**Certified Compostables Leave
NO Persistent Microplastic**

HOW COMPOSTABLES BREAK DOWN

STEP 1 Breaking Apart

In a commercial compost facility, the right mixture of inputs and conditions allow naturally occurring micro-organisms to generate biological activity that starts to populate the surface of the compostable product, consuming it from the outside, and causing the item to disintegrate into smaller pieces that the microbes consume.

STEP 2 Returning to Nature

Once broken into smaller pieces, the naturally occurring microbes continue to consume organic carbon in the material, where the rate of breakdown is a function of time and environmental conditions. The microbes consume the compostable product just as they do the food scraps and yard trimmings in the pile, turning the product into carbon dioxide, water, and nutrient-rich organic matter.

By the end of the process, the material has fully broken down into a stable and mature compost, with no persistent microplastics left behind.

PERSISTENT vs NONPERSISTENT MICROPLASTICS

- Biodegradability is a measurable attribute to determine if a material will persist in the environment as a microplastic, or if the organic carbon can be eaten by microorganisms, where the rate of breakdown is a function of time and environmental conditions.
- In the compost pile, conventional plastics will fragment into persistent microplastics that pollute our soil, the waterways, wildlife, and the food chain.
- Certified compostable products do not create persistent microplastics and facilitate the diversion of food scraps by making it more convenient for individuals and businesses.



Persistent microplastics POLLUTE
our soil, waterways, wildlife, our
bodies, and food chain.

THE BOTTOM LINE

Certified compostable products are designed to break down under the same conditions needed to safely compost all food scraps. In the heat and oxygen of a compost pile, they degrade into elements that help enrich the soil instead of breaking into tiny plastic pieces that stick around in the environment.