Position on fluorinated chemicals

BPI’s overarching goal is to assist in the diversion of organic waste to composting, by verifying that products and packaging will completely break down in a professionally managed composting facility, without harming the quality of that compost.

Our certification program is based on ASTM’s scientific pass/fail standards, set by consensus, which include biodegradation testing of individual components, heavy metals limits, and ecotoxicity testing. BPI prohibits all carcinogens, reproductive toxins, and PBTs, utilizing authoritative lists like Prop 65.

Due to the growing environmental concerns around fluorinated chemicals, often referred to as perfluorinated or polyfluorinated alkyl substance (PFAS) as a class of chemicals, BPI has participated in high-level working groups such as the Green Chemistry Council in 2017. Peer reviewed scientific data is still emerging, but preliminary reports show levels of possible bioaccumulation of some fluorinated chemistries in plants and humans, using biosolids compost as an input. It is also known that the more bioaccumulative form of fluorinated chemicals were phased out by law at the end of 2016. Thus, older data may not be appropriate as compared to data generated this year.

To date, BPI is not aware of any research on fluorinated chemicals in compost from commercial food and yard trimmings compost, which is the primary destination for compostable products. The percentage of BPI certified products received at these large-scale facilities, compared to food and yard trimmings, is extremely small. Therefore, the current risk of our Members’ products for fluorinated chemical bioaccumulation in compost is believed to be low. However, in keeping with our goal of ensuring that certified products do not negatively impact the quality of compost, BPI is proactively participating in the development of tests and further research, to ensure risks to the certification are kept in check.

As an initial step, the BPI Board of Directors and Membership have approved the following changes to strengthen the certification program and limit risks to bioaccumulation:

1. Starting in 2019, require all products to be tested for total fluorine using widely available chromatographic tests, and adopt the European EN13432 compostability limit of 100 ppm as the upper threshold for acceptance.
2. Shortly after, a complete phase out of fluorinated chemistry, by requiring member companies to sign a statement that no fluorinated chemicals are intentionally added, in addition to limiting total fluorine to 100ppm.