



The Flexible Packaging Association Position on Degradable Additives

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The use of oxo-biodegradable and other degradable additives in flexible packaging materials is a complex issue that has resulted in confusion and misleading or unsubstantiated product claims in the marketplace.

It is the position of FPA that:

- Any claim of degradability, especially claims such as “biodegrades in landfills” or “oxo-biodegradable,” needs to be supported by scientific data certified by well established third party authorities.
- Existing claims of oxo-biodegradable and other degradable additives without reference to industry standards, outlining how data must be collected under specific analytical protocols, and accredited third party certifications, are inappropriate and may lead to misunderstanding and misuse.

FPA supports the Society of Plastics Industry definition:

Biodegradable Plastic: a plastic that undergoes biodegradation (a process in which the degradation results from the action of naturally-occurring micro-organisms such as bacteria, fungi, and algae) as per accepted industry standards. As of 2008, accepted industry standard specifications are: ASTM D6400, ASTM D6868, ASTM D7081 or EN 13432.

FPA supports the position statements of the European Bioplastics Association and the Society of the Plastics Industry that in the absence of complete biodegradation, such as is the case with existing oxo-biodegradable and degradable additive technology, fragmentation of plastics into smaller pieces may not result in the intended outcome and may have unintended consequences on litter prevention, composting and recycling such as:

- Giving users of plastic items the impression that those items might vanish harmlessly
- Increasing risk of accumulation of persistent substances in the environment
- Not meeting requirements for organic recovery
- Hampering recycling efforts of post-consumer plastics

FPA supports the Biodegradable Products Institute’s, February 12, 2010, *Background on Biodegradable Additives* position which includes the following:

*Recommendation for purchasing and packaging professionals
Given consumer expectations, the FTC’s direction and new California legislation, the BPI recommends that organizations wishing to use “biodegradable additives” ask the suppliers for the “scientific data” to address the following questions:*



- 1) For “compostable” products, does the entire application (film and package) meet all the requirements of ASTM 6400 or ASTM 6868?
- 2) For “marine biodegradable,” does the entire application (film and package) meet all the requirements of ASTM 7081?
- 3) There are no ASTM specifications that dictate the overall level of biodegradation that must be achieved to make the “biodegradable” claims. However, the BPI recommends that the supplier demonstrate that 90% of the entire plastic film or package (not just the additive) be converted to carbon dioxide under aerobic conditions (like soil burial) or carbon dioxide and methane under anaerobic conditions (as in an anaerobic digester, or landfill) based upon weight and carbon content relative to the positive control using the following internationally recognized test methods as shown below:

Claim	Appropriate Test Methods	Recommended Pass/Fail Threshold	Time Limit
“Biodegradable” or “Biodegrades in a Landfill” (anaerobic environment)	ASTM D5526 or ASTM D5511 or ASTM D6776	Based on correspondence to the BPI from the FTC, it is likely that any unqualified “biodegradable” claim will be judged as deceptive, regardless of the testing data. http://www.ftc.gov/os/adjpro/d9336/091218dynaletter.pdf	
“Biodegrades in landfills” claims are not recommended given recent FTC findings.			
“Biodegrades in Soils” or as Litter Aerobic environment	ASTM D5988	90% conversion of test materials carbon to carbon dioxide relative to the positive control in the test	12-18 months

Note: Only one of the test methods needs to be used to verify the “biodegrades” or landfill claims.

Additionally, FPA recommends that members follow the *FTC’s Guides for the Use of Environmental Marketing Claims*, Section 260.7 (b) which states:

(b) Degradable/biodegradable/photodegradable: *It is deceptive to misrepresent, directly or by implication, that a product or package is degradable, biodegradable or photodegradable. An unqualified claim that a product or package is degradable, biodegradable or photodegradable should be substantiated by competent and reliable scientific evidence that the entire product or package will completely break down and return to nature, i.e., decompose into elements found in nature within a reasonably short period of time after customary disposal.*

Claims of degradability, biodegradability or photodegradability should be qualified to the extent necessary to avoid consumer deception about: (1) the product or package's ability to degrade in the environment where it is customarily disposed; and (2) the rate and extent of degradation.

The FPA will continue to support its member companies and their efforts to substantiate their product claims while at the same time working with them to advance environmentally responsible alternatives.