

## **Degradable Additives Use in Bottles, Forms, and Films:**

*The degradation of otherwise-recycled plastics means lost opportunities for the repeated use of molecules through recycling.*

APR, the Association of Plastic Recyclers, monitors the news of additives which may be included in HDPE, PET and PP bottles and polyethylene films. Certain additives are being offered for the expressed purpose of making plastic packaging degrade rapidly. Such additives are promoted as additions to otherwise non-degrading plastics. Some additives are termed biodegradable. Some are termed oxo-degradable or oxo-biodegradable and some photodegradable. Plastics that are inherently degradable and have been so certified, including polylactic acid, PLA, are not the subject of these inquiries.

APR's response is the degradation of otherwise-recycled plastics means lost opportunities for the repeated use of molecules through recycling. The life cycle conclusion is that repeated use of molecules through recycling leads to less environmental burden than single use of molecules. Repeated use of molecules should lead to more efficient use of natural resources and complement overall sustainability efforts. Recycled plastics can be used for almost all applications original plastics serve including many that stress durability and physical performance.

APR asks those who advocate and specify degradable additives to consider the sustainability implications of degradable additives that lower the functionality of recycled postconsumer plastics when included with recyclable plastics. Degradable additives that weaken products or shorten the useful life of durable plastics have a strongly negative impact of postconsumer plastics recycling. APR provides its Degradable Additives and PET Recycling Technical Compatibility Testing Guidance and its Degradable Additives and Polyethylene and Polypropylene Recycling Technical Compatibility Testing Guidance to assist in evaluations.

Degradable additives should not encourage or excuse poor consumer waste management behavior, such as littering.

APR invites promoters of degradation additives to explain the impact of such materials on the active recycling of bottles, forms, and films. The explanation must include the use of APR Compatibility Testing Guidance documents. APR also invites the presentation of life cycle analyses that show environmental improvement afforded by the additives.

APR also invites the presentation of test data and certification of compliance with international standards for biodegradation for the additives when included with otherwise non-degrading plastics to show degradation claims are met.

APR considers the functional, economic, and environmental consequences of degradation additives and welcomes input.