



iCushion™ OXO-Biodegradable Air Pillows From Intertape Polymer Group (IPG)



Common Questions Regarding OXO-Biodegradable Films

What is the difference between degradation and biodegradation? All films are capable of breaking down into small pieces eventually, which is "Degradation." "Biodegradation" occurs when live organisms convert the pieces into CO₂, water and biomass. "Oxo-biodegradable" indicates that a special oxo additive is present to greatly accelerate the process. This process requires the presence of oxygen and sunlight to initiate the biodegradation process.

What types of biodegradable plastics exist? There are two main types: oxo-biodegradable and hydro-biodegradable. As the names indicate, Oxo-biodegradable plastics require oxygen and UV light to initiate the breakdown of the film while hydro-plastics require the presence of water. For a detailed comparison between the two, please visit www.biodeg.org/position-papers/comparison.

Our company employs a recycling policy for all film waste. Therefore, our film would not be going to the landfill. Recycling continues to be the most environmentally responsible solution. However, we find that not all packaging is properly disposed of even when there is a defined process in place. This is especially true if your products are shipped from your facility and beyond your control.

Can the OXO-Biodegradable Film be recycled and will it contaminate the recycle stream? Yes, they are recyclable as either category 4 or 7. The polymer grades used for Intertape's OXO-Biodegradable films would be among the more preferred materials for most recycle operations. The accumulation of the additive in the recycle stream is mitigated by successive thermal cycles in the extrusion process, and most sophisticated recycle operators will make the appropriate adjustments required to maintain product consistency.

Please refer to the Oxo-biodegradable Plastics Association position paper on recycling of oxo-biodegradable at www.biodeg.org/position-papers/recycling for more information.

Would the additive used to accelerate degradation not decrease the recyclable value of other films that it may be mixed with? We have been advised that the additive would not decrease the function of the other films mixed in unless the total percent of OXO based resin was greater than 20% of the whole. Of course, that will depend on what is being produced from the return waste. Most post-consumer waste is too "dirty" to be used to make high performance product but may work well in the creation of products like recycled decking or park benches.

Are IPG's OXO-Biodegradable films "compostable"? No, our films are not currently designed to be compostable.

What happens to OXO-Biodegradable films placed in a landfill? Oxo-biodegradation requires oxygen, so burying film deep in a landfill will slow the degradation process. However, films with an oxo additive may still degrade more rapidly than films without, provided the proper conditions exist.

According to the Oxo-Biodegradable Plastics Association, "most commercially available oxo-biodegradable plastics will disintegrate in the surface layers of a landfill so long as oxygen is present. Oxygen levels will vary according to factors such as how loose or compressed the waste was when it was buried, how much u/v light is available, and how much further waste material or earth is added to the landfill over what period of time. A fragmented oxo-biodegradable bag will settle more easily than an ordinary plastic bag with trapped contents, and will occupy less space. Test reports for individual products will measure the ability of the material to degrade within a reasonable period." For more information, visit www.biodeg.org/position-papers/landfill.

As the film degrades, does it release "heavy metals" into the environment? No. It contains transition metal ions of Cobalt or Iron or Manganese, which are trace elements required in the human diet. They should not be confused with **toxic heavy metals** such as Lead, Mercury, Cadmium and Chromium, which are never used in oxo-biodegradable plastics.

Does the oxo-biodegradation accelerate the production of methane gas in landfills? This is a phenomenon associated with hydro-biodegradable plastics that are made from corn based materials, not with the oxo-biodegradable films so no, it does not.

Where can I learn more about Oxo-Biodegradable Plastics? The Oxo-Biodegradable Plastics Association web site contains very helpful information. Please visit www.biodeg.org.

Where can I learn more about iCushion™ OXO-Biodegradable Air Pillows? Please visit www.itape.com for more information on this and other LILI™ Approved Products (Low-environmental Impact Line from Intertape).

What pillow sizes are available in the OXO-Biodegradable formula? See chart below.



iCushion® OXO-Biodegradable Air Pillows			
IPG Item #	Roll Width (in)	Cushion Length (in)	Roll Length (ft)
Compatible with iCushion AP8000C Inflatable Air Pillow Machine			
AP150-BIOD8	8	8	2900
AP150-BIOD12	8	12	2900
AP120-BIOD12	8	12	4000
Compatible with iCushion AP2000 Inflatable Air Pillow Machine			
AP120-BIOD42000	8	4	2000
AP120-BIOD82000	8	8	2000