

Oxo Biodegradable™ Plastics

Products incorporating TDPA®, *Totally Degradable Plastics Additives* are designed with a controlled lifetime and when discarded will degrade. www.epi-global.com

A-ROO Company LLC is proud to be working with film substrates using EPI® TDPA® additives in order to provide this economically and earth friendly packaging alternative.

A-ROO can provide customized and standard pattern sleeves or decorative liner sheets (DLS Flip™ Sheet) that when discarded in soil in the presence of oxygen, heat, UV light, mechanical stress (wind or compaction in a landfill) and microorganisms, will *ultimately** biodegrade, decomposing into simple materials found in nature, as described in ASTM D6954-04.

Use environmentally friendly packaging and continue using the quality you've come to expect from A-ROO company at an affordable cost!

These films can also be recycled if sorted properly and degradation has not begun.

EPI's TDPA®:

- are incorporated into PE, PP or PS resins and processed on standard plastic processing machines to produce plastic end products with controlled life cycles
- produce uniform quality end products which are 3 - 4 times more economical than existing starch based technologies
- can produce degradable plastic products in numerous colors and transparencies and retain the characteristics of regular plastics (strong, tough, and flexible) during use.

Degradable Plastic Carrier Bags produced from commodity **PE** resins and incorporating EPI's TDPA® (Totally Degradable Plastic Additives).



Photo illustration of the thermal degradation of a carrier bag incorporating EPI's TDPA® additive (top row) vs. a bag without EPI's TDPA® additive (bottom row). Test procedures follow ASTM D5272 "Outdoor Exposure Testing of Photo Degradable Plastics" Guidelines.

This product is made possible by EPI's pioneering OXO-BIODEGRADABLE additive technology that has been recognized under the ASTM D6954-04 guide.

Exposure to sunlight or heat triggers a two-step degradation process, in which the plastic breaks down through oxidation into small fragments, which then decompose into the natural elements of carbon dioxide, water, and biomass.

Today's consumers want a responsible and sustainable approach to protecting our environment while using low-cost, convenient, and disposable products. These bags are just as strong as ever, they are not affected by moisture and can be used again and again until the breakdown process begins.

Any and all statements, technical information, and recommendations used in this literature are presented in good faith based upon tests believed to be reliable and/or practical experience.

A-ROO Company LLC or any of its affiliates can not guarantee the Accuracy or Completeness of the Information as put forth by the manufacturer of this product and it is the Customer's Sole Responsibility to determine the suitability and use of the this information in any given Application.



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**Biodegradability time frame is dependant upon external environment, visit www.epi-global for further explanation.*



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