

Biodegradable

BIODEGRADABLE CAST POLYPROPYLENE FILM

American Profol cast polypropylene films containing EcoPure™ additive have been shown to biodegrade under ASTM D5511-02 (Standard test method for determining anaerobic biodegradation of plastic materials under high-solids anaerobic-digestion conditions) conditions.* These conditions are designed to simulate anaerobic landfill conditions.

Our films manufactured with EcoPure™ additive are shelf stable and will not begin to biodegrade until the film is in contact with microorganisms commonly found in dirt or landfills. This technology is not dependent upon UV light, heat, or mechanical stress in order to degrade the polymer. Thus, our polypropylene films will remain shelf-stable for extended use applications.

TECHNOLOGY:

EcoPure™ facilitates the breakdown of the large polymer molecules into smaller organic species that are able to be consumed by microorganisms inherent in typical landfill or compost environments. It does this by first expanding the molecular structure of the plastic via water accumulation, which makes the polymer more accessible to microorganisms. It also adds nutrients that promote colonization of microbes on the polymer. The polymer chain is then broken down by the enzymes that are secreted by the microorganisms. Like any organic material that is biodegraded, the plastic will create byproducts, most of which are useful, including humus (which can be used to make soil richer), carbon dioxide, and methane (which can be used as fuel). This biodegradation process can take place aerobically (where there is oxygen, such as in a compost facility) or anaerobically (where there is no oxygen, such as in a sealed landfill).

AVAILABILITY:

- EcoPure™ additive can be added to select of American Profol's films
- FDA compliant grades are available for food applications
- Thickness from 1-12 mil
- Widths up to 94" wide
- In line slitting
- Clear, white and custom colors available
- Corona treat one or two sides
- Custom low seal initiation skin for improved speed through packaging lines

APPLICATIONS:

- Stationery - sheet protectors and 3-ring binders
- Packaging
- Graphics
- Pressure sensitive adhesive substrates
- Protective and automotive masking
- Floral Wraps

* Based on ASTM D5511 testing on American Profol's 5.0 mil Super Clear product. Results may vary based on type and thickness of film. Fitness for use for customer's unique application should be tested by the end user.

The EcoPure logo features the word "EcoPure" in a green and blue sans-serif font, with a green leaf icon above the letter "o" in "Eco".

The statements, technical information, and recommendations contained herein are presented in good faith based upon tests believed to be reliable and/or practical experience. The reader is cautioned that Profol cannot guarantee the accuracy or completeness of the information, and it is the customer's sole responsibility to determine the suitability of Profol's products in any given application.

The logo for American Profol Inc. features the word "American" in a small font above "Profol" in a large, bold, white font with a registered trademark symbol. Below it, "A Profol Group Company" is written in a smaller font.

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