EcoFlex™

A Sustainable AdvantaPure Choice

AdvantaPure™ is pleased to offer the newest product in its AdvantaBio™ portfolio of sustainable components, EcoFlex™ APEF-BP Biopharmaceutical Grade TPE tubing.

EcoFlex, a general-purpose, high-purity thermoplastic elastomer (TPE), is transforming single-use product offerings with sustainability built right in. Designed for pharmaceutical and biopharmaceutical manufacturing, it enables industry partners to advance product-level sustainability goals while maintaining the performance and quality their processes demand.

- Manufactured using renewable energy from solar and other sources to reduce its carbon footprint when compared to traditional manufacturing without renewable energy.
- Uses a bio-based feedstock and a mass balance approach to reduce the raw material carbon footprint.
- Baseline is specific to AdvantaPure in manufacturing process.
- Reduces PCF by approximately 25%, overall, versus a traditionally manufactured TPE – through a unique use of renewable energy together with the bio-based material.

AdvantaFlex™ and EcoFlex: A Comparison

AdvantaPure's flagship product, AdvantaFlex is an industry-wide utilized TPE tubing. How does EcoFlex compare? Both are general purpose high purity thermoplastic elastomer (TPE) materials used in pharmaceutical and biopharmaceutical manufacturing.

Both products are produced using renewable energy from sources such as solar, wind and hydropower giving an initial carbon footprint reduction when compared to traditional manufacturing without renewable energy. This is shown in the difference of the location-based data to the market-based data in Figure 2. Other organizations may manufacture using different equipment and materials, so this baseline is specific to NewAge Industries.

A Unique Approach - Mass Balance

Ecoflex utilizes a bio-based feedstock using the mass balance approach to reduce the raw material carbon footprint. This produces material that is no different in form, fit and function to AdvantaFlex eliminating the need for re-validation or re-testing. (Figure 1)

The use of renewable energy together with a bio-based material reduces product carbon footprint by approximately 25% overall versus a traditionally manufactured TPE. This data will be used to help us continue to plan for our continued work to keep reducing our impact on the environment.

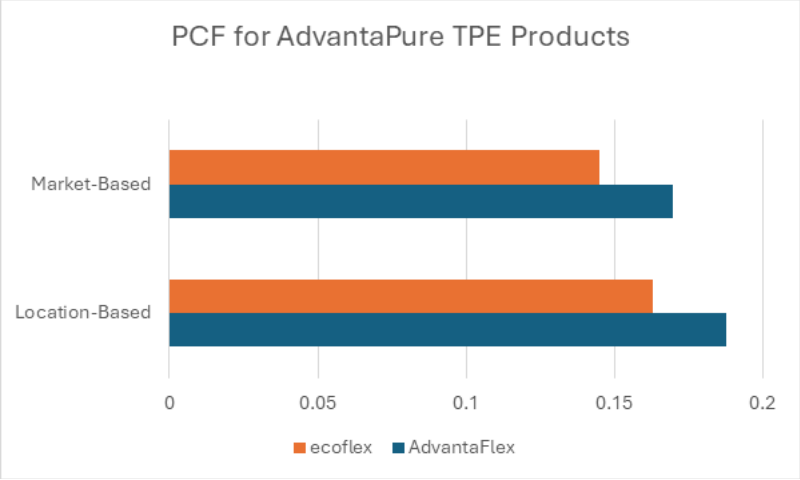

Figure 1: PCF *Comparison between AdvantaFlex and EcoFlex in kg CO_2/ft

**Based on emissions associated with a one foot (30.48 cm) of AdvantaFlex and Ecoflex tubing from raw material extraction to production of the final product (cradle-to-gate).*

Frequently Asked Questions

- **What is a product carbon footprint (PCF)?**

  A product carbon footprint measures total greenhouse gas emissions (GHG) produced throughout the lifecycle of a product. Measurement can begin at the sourcing of raw materials through the final product leaving the manufacturer or all the way to the end of the life of the product. PCF calculations are needed in some parts of the world to meet new and existing regulations. This data allows our company to set realistic and measurable targets to reduce emissions.

- **What are greenhouse gases?**

  Greenhouse gases are atmospheric gases, such as carbon dioxide, that can intensify the natural trapping of warmth on the planet and lead to global warming and climate change if they increase.

- **What is a life cycle assessment (LCA)?**

  A life cycle assessment includes more than GHG measurement. It is comprehensive and accounts for a wide range of environmental and social impacts of a product in a range of categories such as carcinogenics, and global warming.

- **What is a bio-based material?**

  This refers to materials derived from renewable organic sources like plants, plant waste, and used oil.

- **What is the mass balance approach?**

  This uses a process for tracking clearly defined inputs (e.g. bio-based or recycled materials) through production and assigned to outputs (finished goods) via an audited accounting approach. This is done so that any claims for sustainability can be verified even if the inputs are mixed with traditional materials.

For more information, please contact our Account Representative team.

About our Sustainability Program

We are continuously working to reduce the greenhouse gases (GHG) associated with our products by calculating their impact. The GHG Protocol Corporate Accounting and Reporting Standard categorizes GHG emissions into scopes 1, 2 and 3 which cover direct and indirect emissions. Scope 3 emissions, which include the supply chain, are typically much larger than Scope 1 and 2 combined. Many of our customers are working with their suppliers to reduce emissions in this area and some have already set targets to be met.

PLATINUM Top 1% ecovadis Sustainability Rating JUN 2025

Certified B Corporation

AdvantaPURE™