



EVGREEN® BIODEGRADABLE MATERIAL FAQ

WHAT IS EVGREEN®?

EVGreen® is Epsilyte's biodegradable expandable polystyrene (EPS). This advanced material looks and performs the same as standard EPS, has the same shelf life, and continues to be recyclable along with all polystyrene.

This technology transforms a standard molded product into a product with a new end-of-life story.

ARE THERE OTHER BENEFITS OF USING EVGREEN®?

EVGreen® is engineered for anaerobic biodegradation. Since the material does not promote oxo-biodegradation, the resin does not become brittle, and no shelf-life adjustments need to be made.

EVGreen® requires no special packaging, no changes in resin properties, nor does it biodegrade without a microbe-rich environment.

Note: Biodegradation occurs in landfills and lowers the volume of material in a landfill cell, freeing up landfill space.

DOES EVGREEN®'S RATE OF BIODEGRADATION CHANGE IN DIFFERENT ENVIRONMENTAL CONDITIONS?

Like organic materials, EVGreen® has variable decomposition rates based on environmental conditions. EVGreen® is shown to biodegrade 92% over four years under conditions that simulate both wetter and biologically active landfills using the ASTM D5511 test. While 80% of landfills are "wetter" or biologically active, they may not exist in your area. The stated rate and extent of degradation do not mean the product will continue to degrade.

Note: Any landfill in the United States and Canada located within >20" of annual rainfall is considered "wetter".

WHAT IS LEFT BEHIND AFTER EVGREEN® BIODEGRADES?

EVGreen® leaves the same byproducts as organic material decomposition. These include carbon dioxide (CO₂), methane (CH₄), and other renewable organic materials. This landfill gas is captured and burned for fuel without leaving microplastic contamination behind.

Note: This biodegradation occurs in landfills and lowers the volume of material in a landfill cell, freeing up landfill space.

ARE THERE OTHER TYPES OF BIODEGRADATION?

EVGreen® is engineered for anaerobic biodegradation, meaning biodegradation occurs without air and produces methane. Aerobic biodegradation happens in the air and produces CO₂.

Note: Most landfills are designed for both aerobic and anaerobic biodegradation.

HOW IS BIODEGRADABLE DIFFERENT FROM COMPOSTABLE?

There is just one difference between composting and biodegrading: When compostable materials degrade, they contribute to soil fertilization.

WHERE CAN YOU RECYCLE EVGREEN®?

Call your local recycling drop-off site to ensure that they accept EPS and in what form. Most accept EPS packing material. There are more than 500 EPS recycling programs across North America.

Epsilyte's long-term goal is for every pound of EPS to be recycled in-kind, creating a circular life cycle.
