



2026
WINNER



Nelipak Wins 2026 DuPont™ Tyvek® Sustainable Healthcare Packaging Award for Sustainability In-use

CASE STUDY

Overview

The Tyvek® Sustainable Healthcare Packaging Awards recognize innovations that advance sustainability throughout the healthcare packaging lifecycle. The Sustainability In-use category highlights initiatives that significantly reduce material use, improve recyclability and lower carbon emissions while maintaining patient safety and regulatory compliance.

Project

Nelipak Healthcare Packaging, a manufacturer of sterile barrier packaging, developed Ecovate™ headerbags, a new all-polyethylene laminate combining mono-axially oriented PE (MOPE) with blown co-extruded PE and Tyvek® with Renewable Attribution. The result is a sustainable, recyclable alternative to the mixed-material header bags widely used across the growing ready-to-fill/use (RTF/U) market.

Challenges

Header bags are used extensively as sterile barrier packaging for the EtO sterilization of medical devices, kits and RTF/U systems, but they have historically relied on fossil oil derived laminates. These multi-material structures are non-recyclable and typically incinerated at end of life. This is a growing liability, as the RTF/U market, valued at approximately \$42.1 billion globally with a projected growth to \$69.4 billion, continues to expand alongside demand for biologics and injectable therapies.

Solution

Nelipak replaced the legacy BOPET/PE (RIC 7) laminate with a mono-material polyethylene structure incorporating Tyvek® with Renewable Attribution, achieving true mono-material status while engineering the film to maintain the mechanical performance, pinhole resistance and sterile barrier protection required for high-speed automated filling.

The Ecovate™ headerbag platform delivers measurable sustainability benefits including:

- Third-party recyclability certified by Institut Cyclos-HTP, recyclable in the Flex PE stream
- Manufactured using renewable electricity to further lower the emissions footprint
- Potential to lower the product's greenhouse gas footprint by up to over 40%, assuming end-of-life recycling
- Supported alignment with EU Packaging and Packaging Waste Regulation (PPWR) Article 6 mono-material requirements

Summary

By converting a high-volume, historically non-recyclable packaging format into a certified, mono-material recyclable solution including Tyvek® with bio-circular material, Nelipak has shown how healthcare packaging can meet the performance demands of automated, high-speed filling while enabling end of life recycling.

For this achievement, Nelipak Healthcare Packaging was named the 2026 DuPont™ Tyvek® Sustainable Healthcare Packaging Award winner in the Sustainability In-use category.