

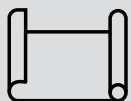


Exceed™ Stiff+

Collation shrink films incorporating 50% recycled content maintain performance



Incorporation
of recycled
content



Film
integrity



Brand
promotion/
appeal



Easy
processability

Challenge

Help promote plastics circularity by developing collation shrink films incorporating recycled content, while maintaining mechanical properties and thickness.

Responding to brand owner commitments, consumer feedback and regulatory changes, the Barbier Group, a leading polyethylene (PE) film converter and recycler based in France, wanted to develop a collation shrink film incorporating 50% recycled content. It was also important that Barbier maintained the mechanical properties and thickness of collation shrink films it had previously made with 100% virgin PE.

“As converters, it is important that we play our part in helping the value chain meet evolving sustainability needs,” said Hugo Baralon, Purchasing Manager, Barbier. “Including recycled content in the film without impacting performance compared to films made with 100% virgin PE is key for brand owners and consumers.”

Solution

Incorporates 50% recycled content with Exceed™ performance PE polymer for high package performance.

Barbier and ExxonMobil collaborated to develop a solution that incorporates recycled content without compromising performance, film thickness or processability.

Working together they developed a film formulation based on Exceed™ Stiff+ m 0238 performance PE polymers, which can act as a performance booster when combined with recycled content in demanding applications like collation shrink films.

The recycled content is generated by Barbier from waste collected in France (e.g., logistics centers, retailers, industrial companies). Typically, the recyclate is sourced from industrial packaging waste generated at supermarkets, a stream of transparent shrink and stretch films. Incorporating 50% recycled content of such a mixed and variable stream in a technical film like collation shrink can be a challenge. Barbier then uses the recyclate to produce new films containing 50% recycled content which it labels Recyclast® 50. Full traceability between collection, recycling, extrusion and printing can provide confidence to customers.

The high density of Exceed™ Stiff+ m 0238 performance polymers provides the stiffness needed to deliver the holding force, cuttability and handling required for highly effective collation shrink films, even when they contain recycled content. Exceed polymers offer unique value because of the combination of high mechanical properties and shrink performance they deliver.

Results

A high-performance collation shrink film containing 50% recycled content

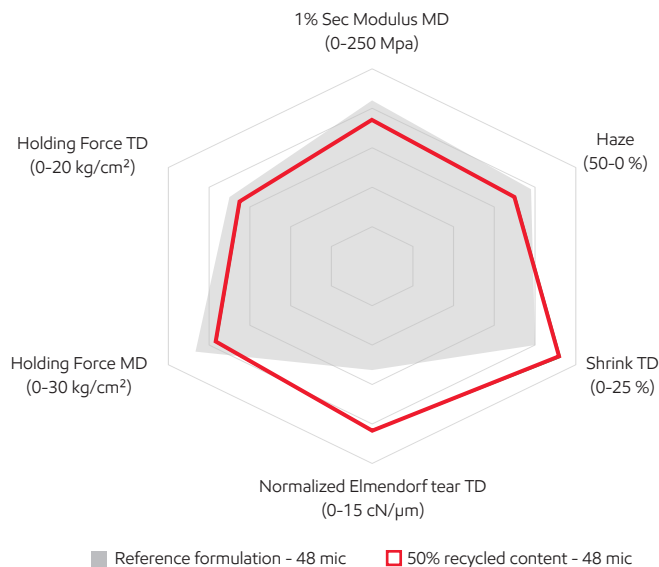
The collaboration between Barbier and ExxonMobil has resulted in the fabrication of collation shrink film solutions that deliver:

- A solution incorporating 50% recycled content
- No degradation in mechanical properties for packages
- Optical properties, such as gloss and transparency, that allow brand owners to promote products effectively
- Moderate operational changes to the end-user's machine settings.

"In Europe, some major brand owners in the beverage industry have started to switch from films made with 100% virgin PE material to films containing 50% recycled content. We expect that trend to accelerate in the future, as brand owners look to reduce plastic waste and reduce their carbon footprint," said Olivier Pochon, Industry Sales Manager, Barbier.

"Barbier is committed to helping the value chain develop more sustainable solutions today by promoting the use of recycled content, while maintaining performance. This solution will enable Barbier to meet growing demand from brand owners in Europe helping it to maintain its market position, while unlocking new opportunities in other regions."

Comparison of 100% virgin film versus film incorporating 50% recycled content



Tests performed solely by Groupe Barbier according to following standards:
-Tensile: NF EN ISO 527-3
-Haze: ISO 14782
-Retraction: NF EN ISO 14616
-Elmendorf tear: NF EN ISO 6383-2

Contact us for more information: exxonmobilchemical.com/pe

ExxonMobil
Signature Polymers

Bring your impossible



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What’s new: ExxonMobil Signature Polymers

All our polymers are now positioned under a single portfolio brand: Signature Polymers. The aim is to simplify our product architecture and naming to improve portfolio navigation for you. We would like to stress that our commitment to high quality products remains the same, it is the names that change. Everything else remains the same. We will be making these modifications over the next six months so you will see both old and new grade names highlighted during that time.

Here’s a quick overview of brands and grade names that have changed in this document:

Legacy commercial name	New commercial name
Enable™ 4002	Exceed™ Stiff+ m 0238

Some of our existing Exceed, Achieve, Paxon and premium PP/HD grades have moved to Exceed brand; most existing Enable grades have moved to Exceed Flow[+]; most of our existing Exceed XP grades have moved to Exceed Tough[+]; most of our existing Exceed S grades have moved to Exceed Stiff[+]. More details here https://www.exxonmobilchemical.com/en/brands/signature-polymers/exceed_high_performance_polymers or contact your ExxonMobil representative to know more.

Want to see what’s changed in our portfolio? Go to [exxonmobilchemical.com/sptransform](https://www.exxonmobilchemical.com/sptransform)