



Exceed™ Tough

Exceed™

Recyclable* cast barrier PE thermoformed packaging with good optics

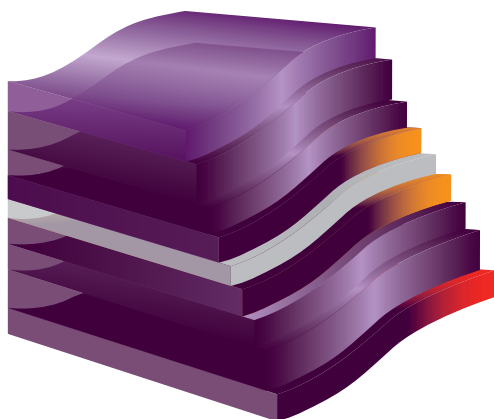


Data and results presented herein apply specifically to the noted application under this case study. Your results may differ depending on factors such as operating conditions, equipment and materials used.

Challenge

To produce a recyclable*, cast barrier, PE-rich thermoformed package delivering functionality and good optics.

- Exceed™ m 3516
- Exceed™ Tough m 3812
- Tie
- EVAL™ EVOH
- ExxonMobil™ LD 2023FL



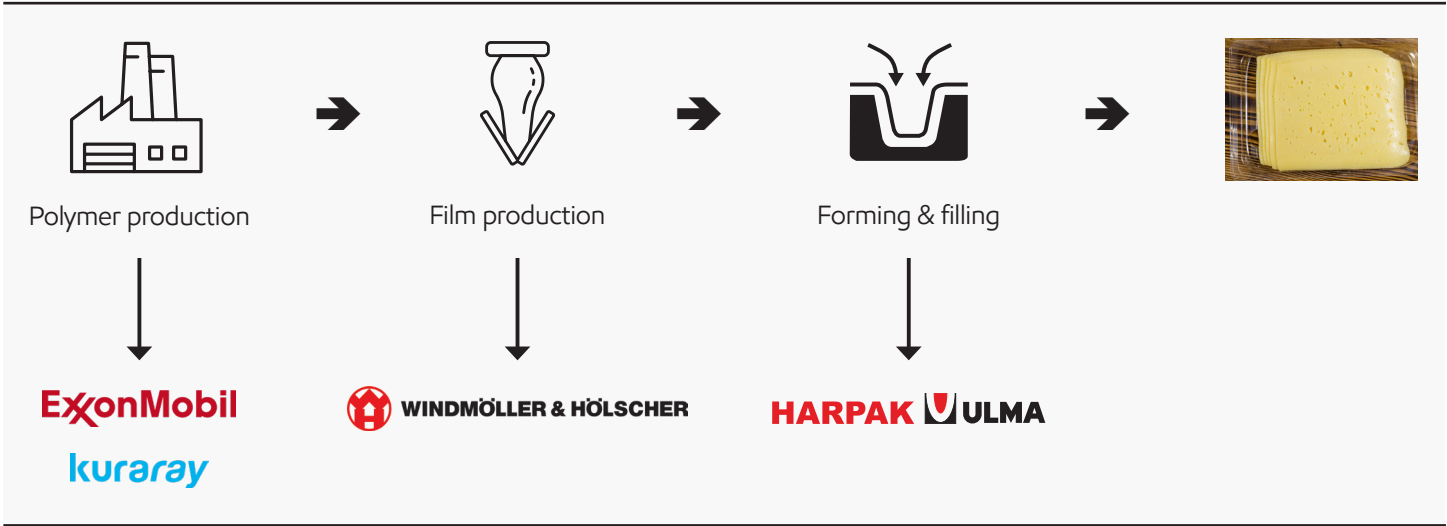
Solution

The value chain collaborated to create a thermoformed package, consisting of a formed recyclable cast PE-based top and bottom web with both high oxygen barrier and very good package integrity (puncture performance) along with optimized formability and excellent optics. The top and bottom webs were produced with ExxonMobil best-in-class resins like Exceed™ Tough. A new resin by Kuraray, EVAL™ XEP 1393B EVOH, designed for thermoforming, provided the high oxygen barrier to the forming web.

The films were produced on an 11-layer FILMEX II barrier cast film line from Windmüller & Hölscher. ExxonMobil resin Exceed Tough provides very good puncture performance and formability, while the Kuraray resin designed for thermoforming offers high barrier properties. Harpak-ULMA Packaging validated the film's forming and sealing performance on their TFS-200 model thermoformer, producing sample packages for testing and market development.

*Recyclable in the few communities with programs and facilities in place that collect and recycle thermoformed packaging.

The process:



Contact us for more information: exxonmobilchemical.com/pe

ExxonMobil
Signature Polymers

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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
Exceed™ XP 8346	Exceed™ m 3516
Exceed™ 3812	Exceed™ Tough m 3812
ExxonMobil™ LDPE LD 185 BW	New ExxonMobil™ LD 2023FL

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)