



## ExxonMobil performance polymers help maintain packaging performance in heavy duty sacks that incorporate 50% recycled content



Incorporates  
recycled content



Good bag drop  
performance



Maintains packaging  
integrity

### Challenge:

ExxonMobil wanted to help support a plastics circular economy by bagging some of its resins in heavy duty sacks (HDS) incorporating recycled polyethylene (PE) content. The company wanted to develop a solution that would include recycled polyethylene (PE) content without compromising performance.

### Solution:

The ExxonMobil Meerhout Polymer Plant (MPP) in Belgium is delivering some of its PE resins to customers in HDS that incorporate 50% recycled PE content. Packaging performance properties and the original thickness of the HDS are maintained, thanks to the addition of Exceed™ XP and Exceed™ performance PE polymers, which help to compensate for any physical property degradation due to the incorporation of recycled content.

"Our performance PE polymers are proven to be excellent boosters in film formulations incorporating recycled content," said Dirk Permentier, Regional Technology Manager. "Exceed XP and Exceed polymers can help deliver mechanical properties in line with industry standards for high integrity sacks, while bag drop performance outperforms the reference virgin PE film formulations in ExxonMobil testing."

Exceed XP 8318 is designed to deliver enhanced toughness (puncture/tear resistance), while Exceed1012 can help to increase bag drop resistance and can enhance sealing performance compared to reference film formulations. The recycled content is supplied by The Selene Group, which recycles\* end of life polymer bags from a logistics center where polymer bags are opened and their contents emptied and then used to fill bulk trucks. Selene then sorts, washes, de-inks, and re-pelletizes the used bags into what Selene refers to as "Premium Recycle Polymer". A thorough assessment is conducted by Selene to confirm the performance of the recycled polymer before it is combined with Exceed XP and Exceed to make the new HDS being used by MPP, called Selene NextBag™.



This package is made with 50% recycled content from end of life polymer bags and ExxonMobil performance PE polymers which help maintain its packaging integrity and performance.

\*Recyclable in communities with programs and facilities in place to collect and recycle plastic film.

## Results:

"Value chain collaboration is key to the industry developing solutions with sustainability benefits," said Thierry de Barneville, Regional Sales Manager, EMPS. "Great teamwork with Selene helped address the many challenges faced in bringing this solution to market."

"This technology innovation represents a step in contributing to a circular plastics economy," said Franck Anckenmann, Regional Logistics and Distribution Manager. "Recycling\* valuable end of life plastic bags from logistics operations and then using them as a raw material to make new plastic bags helps to close the loop."

"We're looking at similar projects for our PE Europe sites such as Notre Dame de Gravenchon (NDG)," he added. "As for the rest of the worldwide plants network, they are transitioning to Exceed™ XP-based packaging solutions that can provide thinner films globally."



## Why ExxonMobil PE? Why today?

tomorrow's  
performance  
today

What some might view as solutions that will only happen in the future, ExxonMobil PE is making possible today – through our innovative and reliable products, collaborative approach, technology leadership and support, and our unmatched global supply and resources. Why wait for tomorrow to advance your business today? Learn more about how we're helping our customers create packaging solutions with sustainability benefits now. Contact your ExxonMobil PE representative and begin experiencing tomorrow's performance today.

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