



Exxtra™ Seal Exceed™ Tough+

ExxonMobil Signature Polymers help maintain packaging performance in heavy duty sacks that incorporate 50% recycled content



Incorporates recycled content



Good bag drop performance



Maintains packaging integrity

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

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 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™ Tough+ high performance polymers and Exxtra™ Seal advanced performance polymers, which help to compensate for any physical property degradation due to the incorporation of recycled content.

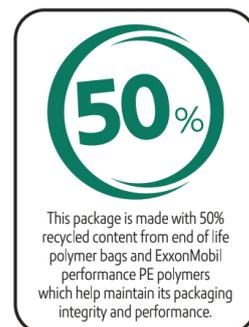
“Our performance PE polymers are proven to be excellent boosters in film formulations incorporating recycled content,” said Inge Daems, Regional Technology Manager.

“Exceed Tough+ and Exxtra Seal performance PE 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 Tough+ m 1019 metallocene polyethylene is designed to deliver enhanced toughness (puncture/tear resistance), while Exxtra Seal m 1012 metallocene polyethylene 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 Tough+ and Exxtra Seal resins to make the new HDS being used by MPP, called Selene NextBag™.



Results

“Value chain collaboration is key to the industry developing solutions that incorporate recycled content,” said Bram Denie, Regional Sales Manager, ExxonMobil Product Solutions. “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 Stefaan Roose, 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.”

“The rest of the worldwide plants network are transitioning to Exceed™ Tough+ performance PE-based packaging solutions that can provide thinner films globally,” he added.



ExxonMobil
Signature Polymers

Bring your impossible

ExxonMobil Signature Polymers was born from the belief that people fuel progress. From automotive and construction to packaging, agriculture, industrial, and beyond, we leverage the scale and reach of ExxonMobil to deliver the insights and innovations that empower our diverse, global partners to take their businesses to new heights. We continuously work to provide the listen-first, service-driven, game-changing collaboration that unlocks opportunities for our partners and advances and their business goals.



© 2026 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.