



Exceed™ XP Exceed™ Enable™

ExxonMobil



tomorrow's
performance
today

ExxonMobil performance polyethylene

Innovative fully recyclable* non-laminated PE stand-up-pouch



Recyclable*



Sealability



Toughness



Shelf appeal

Challenge:

Today, the Chilean government is demanding that the nation's industry develop and introduce more sustainable flexible packaging solutions by 2025. One focus is on packaging solutions which are recyclable or use recycled plastic so that valuable resources are kept in the manufacturing loop longer and waste is reduced.

Stand-up pouches (SUPs) have traditionally created a challenge for recycling because they are often complex laminated structures comprised of different materials, such as PE//BOPET or PE//BOPA, which can be difficult to separate.

Winpack group, a major converter based in Chile, wanted to change that, so they turned to the ExxonMobil PE product and technology teams to help deliver an innovative solution for a full polyethylene non-laminated SUP to package frozen fruit.

Solution:

Winpack group collaborated closely with ExxonMobil PE to develop an innovative fully recyclable, non-laminated polyethylene (PE) stand-up-pouch that would meet the country's growing demand for sustainable solutions while delivering the performance and protection products need. The result is the first full PE non-laminated SUP to be made commercially available by Solpack Chile, one of Winpack's companies, in the LAMEX region. Full PE SUPs can be easily recycled where programs and facilities to collect and recycle plastic films exist.

"We have worked together with the ExxonMobil PE business on other successful packaging film applications in Chile. Plus, they have collaborated with Solpack, our sister company in Peru, so we knew that this relationship would develop innovative solutions," said Salustra Solarte, Development Manager, Winpack group. "By combining their technical expertise,

WINPACK

*Recyclable in communities that have programs and facilities in place that collect and recycle plastic film.

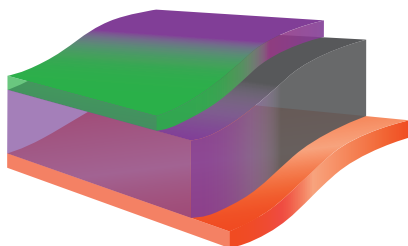
laboratory analysis and polymer innovation with our converting and application know-how we delivered the right product for this market.”

One of the biggest challenges that had to be overcome was the heat encountered in the SUP assembly line. One of the reasons conventional structures use BOPA or BOPET substrates laminated with PE is to provide the heat resistance required to prevent the film sticking on the sealing bars. In this full PE SUP, heat resistance was provided by combining the right polyethylene film with a special coating.

Results:

Following a period of development and testing, the final film formulation for the fully recyclable non-laminated PE SUP is a 3-layer (1/2/1) structure. The structure works as a non-laminated solution by having a higher density in the outside layer and core. The toughness, sealability and optical properties required for the SUP are delivered using Exceed[™] XP, Exceed[™] and Enable[™] performance PE polymers. Exceed[™] XP is specifically used to boost mechanical properties.

- A. Exceed XP 8358ML
Enable 3505MC
- B. Exceed 8358ML
HDPE
- C. Exceed 1012MK



“This innovative fully recyclable pouch has been developed to meet Chilean market needs in 2025, but we believed it was important to have it available today. It is our first full PE non-laminated SUP to be made commercially available in the region and there has been a great deal of interest from our customers. We are convinced it will deliver value to our business through new market opportunities and increased sales.”

**-Cristian Basaez, Development & Innovation Director,
Winpack group.**

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 more sustainable solutions now. Contact your ExxonMobil PE representative and begin experiencing tomorrow’s performance today in flexible packaging.

©2023 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.

Contact us for more information:
exxonmobilchemical.com/pe

ExxonMobil