

# Deliver appliances to homes efficiently and in optimum condition using stretch hood packaging

Energy lives here™



Brand owners are increasingly turning to stretch hood solutions for white goods and appliance packaging.

These stretch hood solutions can result in cost savings, better packaging performance and significant value when compared to traditional cardboard and shrink hood alternatives.

ExxonMobil's industry-leading performance polymers enable film producers to fabricate tailor-made EVA-free stretch hood packaging solutions for appliance manufacturers. These films offer a combination of controlled toughness, elasticity, holding force, high clarity, as well as operational flexibility.

Benefits & potential value	Film attributes
<b>Packaging integrity</b> <ul style="list-style-type: none"> <li>Keeps appliances protected</li> <li>Fewer damaged and returned goods</li> </ul>	<ul style="list-style-type: none"> <li>Excellent toughness and strength</li> </ul>
<b>Load stability and in-line packaging flexibility</b> <ul style="list-style-type: none"> <li>Keeps appliances secure during transportation</li> <li>Flexible (automatic) adaptation to appliance height, width and depth</li> </ul>	<ul style="list-style-type: none"> <li>Easy control on film elasticity and holding force</li> </ul>
<b>High transparency</b> <ul style="list-style-type: none"> <li>Easy bar code reading</li> <li>Product visibility and retail display</li> </ul>	<ul style="list-style-type: none"> <li>Outstanding optical properties</li> </ul>

### Toughness and load stability for fewer damaged goods

Stretch hood films made with Exceed™ and Vistamaxx™ performance polymers, with or without Exceed™ XP performance polymers, offer toughness, high tear and tear propagation resistance, with excellent puncture resistance. This provides high package integrity, keeping appliances protected during transportation and storage to reduce the amount of damaged and returned goods. These films offer controlled elasticity and holding force for load stability that keeps appliance secure during transportation from the factory floor, to retail outlets and to homes.

### Flexible packaging solutions

Stretch hood systems enable fully automatic adaptation for packaging different appliance sizes, whether it be height, width or depth. This provides optimum operational in-line flexibility for minimum downtime when changing from one appliance size to another.

### High transparency for brand visibility

Stretch hood films made with Exceed and Vistamaxx polymers, with or without Exceed XP, deliver high clarity for effective brand visibility in retail outlets, easy bar code reading and excellent quality control.

when  
**extreme**  
Performance  
matters

### Cost savings

Stretch hood packaging solutions for appliances offer significant cost savings compared to alternatives such as shrink hood and cardboard through:

- Cost savings of up to 80% compared to cardboard
- 15-25% cost savings when compared to other films (shrink/conventional stretch hood)
- Fewer damaged and returned goods
- Reduced stock inventory compared to cardboard due to higher stacking opportunities
- Flexible (automatic) adaptation to appliance height, width and depth
- High packaging line speeds of more than 120-240 loads/hour
- No need to use natural gas or open flame



### Outperforms existing appliance packaging systems

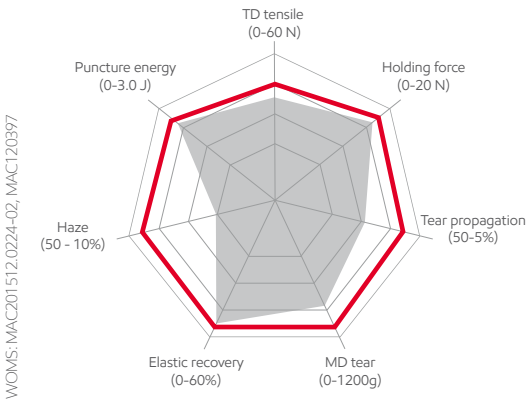
The stretch hood packaging system for appliances offers a myriad of benefits. It represents major advances in performance compared with typical industrial packaging systems.

Performance criteria	Shrink hood	Card-board	Stretch hood
Packaging cost per load	◆	●	▲
Operating cost	◆	●	▲
Packaging speed	▲	◆	▲
Load protection	◆	▲	▲
Load versatility	◆	●	▲
Safe operation	●	●	▲
Ability to recycle material	▲	▲	▲
Storage and logistics management	◆	●	▲

▲ Optimum ◆ Good ● Acceptable

Figure 1:

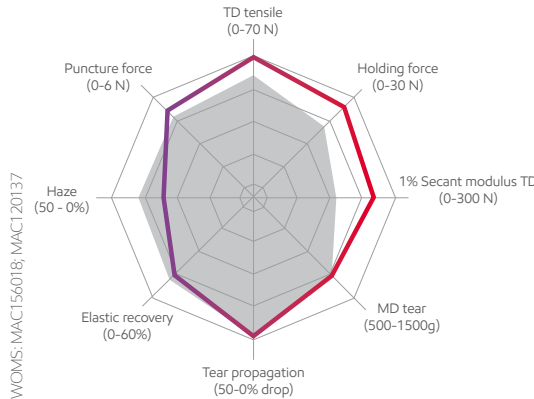
Selected properties for an Exceed™ and Vistamaxx™ performance polymers film (EVA-free), compared to a HEVA C6LLDPE reference film – both 3-layer, 80 µm.



WQMS: MAC201512.0224-02, MAC120397

Figure 2:

Selected properties for an Exceed™ XP, Exceed and Vistamaxx performance polymers film, compared to a HEVA film, both 3-layer, 100 µm.



WQMS: MAC156018, MAC120137

**Table 1: Product data for Exceed and Vistamaxx formulated film and reference.**

	Exceed and Vistamaxx based film solution			Reference film		
	1	3	1	1	3	1
Exceed 1018	●		●			
Exceed 1012		●				
Vistamaxx 3020		●				
ExxonMobil LDPE		●				

**Table 2: Product data for Exceed XP, Exceed and Vistamaxx film and reference.**

	Exceed XP based EVA-free film solution			HEVA Reference film		
	1	3	1	1	3	1
Exceed XP 6026		●				
Exceed 1018	●		●	●		●
Vistamaxx 3020		●				
HEVA						●

### Exceed™ XP performance polymers – when eXtreme Performance matters.

©2018 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 Chemical" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

Contact us for more information:  
[exxonmobilchemical.com](http://exxonmobilchemical.com)

X0418-086E49

**ExxonMobil**  
 Energy lives here™