



Exceed™ Tough+

Low density Exceed™ Tough+ performance polyethylene extends the extreme performance of stretch hood films

Exceed Tough+ grades extend the extreme performance of stretch hood films by delivering remarkable mechanical properties with a combination of low density and fractional melt index (MI).



High holding force and elasticity



Extreme puncture



Low haze with easy openability



Formulation simplification

Exceed Tough+ m 0211 and m 0512 performance polyethylene offer the value chain a combination of attributes — including levels of elasticity and holding force, puncture resistance, and low haze — currently unavailable in a single resin.

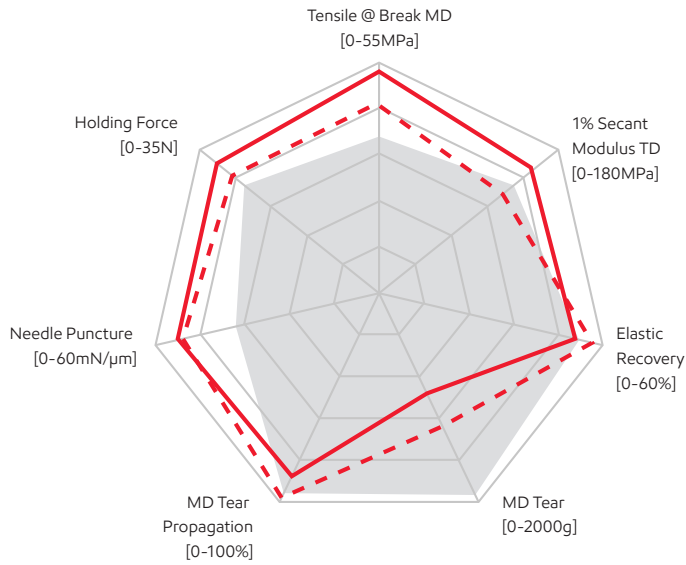
Beneficial attributes

- High elastic recovery for easy stretching and high holding force
- Bubble stability for good gauge profile
- Low haze with easy openability
- Extreme puncture resistance

Value

- High film softness, even without HEVA or plastomers
- Film formulation simplification with a single resin solution
- Trouble-free hooding operations
- Enhanced pallet stability for better product protection and improved safety
- Improved barcode and QR code reading
- Single resin Exceed Tough+ based film, contributing to its recyclability*

3-layer 120 micron stretch hood film solutions based on Exceed™ Tough+ m 0512 performance polyethylene and Vistamaxx™ 6102 performance polymer offer significant benefits compared to a 120 micron market reference alternative, as can be seen in the chart below.



	Market reference 120µm	ExxonMobil solution 1 120µm	ExxonMobil solution 2 120µm
Skins	C6mLLDPE*	Exceed Tough+ m 0512*	Exceed Tough+ m 0512*
Core	C8mLLDPE Vistamaxx 6102	Exceed Tough+ m 0512	Exceed Tough+ m 0512 Vistamaxx 6102

*Slip and anti-block masterbatch added in skin layers.
 C6mLLDPE: 1.0g/10min MI; 0.918 g/cm³ Density
 C8mLLDPE: 0.80g/10min MI; 0.905 g/cm³ Density
 Data from tests performed by or on behalf of ExxonMobil.
 Data traceability: R2005-001026; R2103-003320

Grade	Melt index (g/10 min)	Density (g/cm ³)	Slip / anti-block
Exceed Tough+ m 0211	0.20	0.911	No
Exceed Tough+ m 0512	0.50	0.912	No

Extend the extreme performance of your stretch hood films using Exceed™ Tough+ performance polyethylene.

Test item	Test based on
MI (Melt Index)	Test method based on ASTM D-1238
Density	Test method based on ASTM D-4703 and AS™ D-1505/ISO 1183
Tensile at Break	Test method based on ASTM D-882
1% Secant Modulus	Test method based on ASTM D-882
Elmendorf Tear	Test method based on ASTM D-1922
Holding Force	Test method based on ExxonMobil method
Needle Puncture	Test method based on CEN 14471 (probe diameter = 0.8 mm)
Tear Propagation	Test method based on ExxonMobil method
Elastic Recovery	Test method based on ExxonMobil method

Contact us for more information: exxonmobilchemical.com/pe


Bring your impossible

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 7021	Exceed™ Tough+ m 0211
Exceed XP 7052	Exceed Tough+ m 0512

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)