



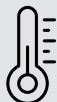
Vistamaxx™ performance polymers

Value-added solution for extrusion coated PP woven sacks

Manufacturers of polypropylene (PP) woven sacks are looking for improved package integrity and increased production efficiency while optimizing costs. The quality of the coating layer applied, plays an important role in achieving these objectives. The versatility of Vistamaxx™ performance polymers provides innovation opportunities when formulating this coating.



Excellent inherent
adhesion to PP woven



Low seal initiation
temperature



Downgauging
and cost reduction
opportunities



Outstanding compatibility
with PE and PP



Easy processing

Data and results presented herein apply specifically to the noted application under this fact sheet. Your results may differ depending on factors such as operating conditions, equipment and materials used.

Tailored coating properties for PP woven sacks

Because they are highly compatible, Vistamaxx polymers can be blended with polypropylene (PP) and polyethylene (PE), allowing the coating properties to be tailored to meet the needs of end-use applications. As a result, Vistamaxx polymers enable manufacturers to develop added-value products while offering downgauging and cost optimization opportunities.

Block bottom bags with a coating layer including Vistamaxx polymers exhibit excellent bag integrity with lower reject rates, reduced sealing temperature and material cost, while downgauging of 20-30% is possible.

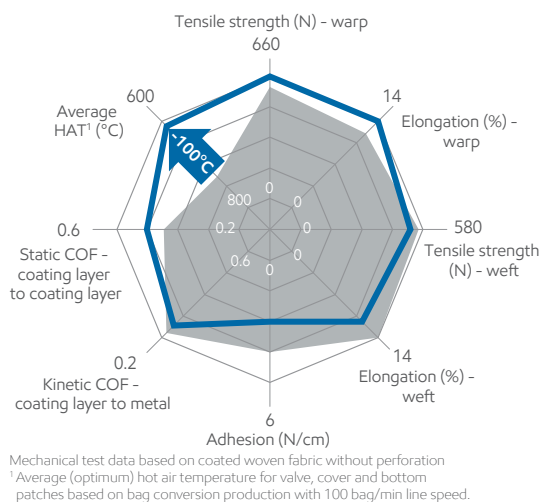
Using Vistamaxx polymers in the filler based coating layer of woven sacks offers a number of benefits compared to reference materials such as an LLDPE-based masterbatch. They deliver excellent adhesion and tensile strength for high sack integrity during and after stitching. Static coefficient of friction (COF) can be increased by as much as 14% for good anti-skid performance for better stacking stability during transportation and storage. A Vistamaxx polymer-based masterbatch allows drop-in processability for a smooth transition from using an LLDPE-based masterbatch. Cost reductions are possible because Vistamaxx polymers allow increased use of calcium carbonate filler for lower material costs, while adhesion strength is maintained.

Other PP woven sacks, including flexible intermediate bulk containers (FIBC), with a coating layer using Vistamaxx™ performance polymers exhibit excellent adhesion, anti-skid properties and lower material cost, while providing an opportunity to downgauge by about 17%.

Value added solutions for block bottom bags

To optimize costs, manufacturers of extrusion coated PP woven bags are looking to seal rather than stitch PP woven sacks. Vistamaxx polymers seal at significantly lower temperatures while providing extremely high seal strength. This provides opportunities to save energy on bag conversion lines, while avoiding thermal degradation of PP woven fabrics to reduce failure in use. Block bottom bags with a Vistamaxx polymer-based coating layer deliver excellent bag drop performance. Vistamaxx polymers can also optimize material consumption through the use of blends and downgauging.

Figure 1: Vistamaxx 3588FL-based coating layer for block bottom bag



60 gsm PP woven	Reference	Vistamaxx 3588FL-based
Coating weight	25 gsm	17 gsm
Formulation	85% Homo PP 15% LDPE	30% Vistamaxx 3588FL 55% Homo PP 15% LDPE

Manufacturers are turning to Vistamaxx polymers because they offer the following benefits in extrusion coated PP woven bags:

- Cost advantages by 30% downgauging
- Energy savings with an average hot air temperature reduction of up to 100°C
- Superior bag integrity with excellent adhesion strength
- Smooth bag conversion at high line speeds
- Easy processing with PP and PE
- Excellent value in use versus alternatives

Typical applications for extrusion coated PP woven bags include:

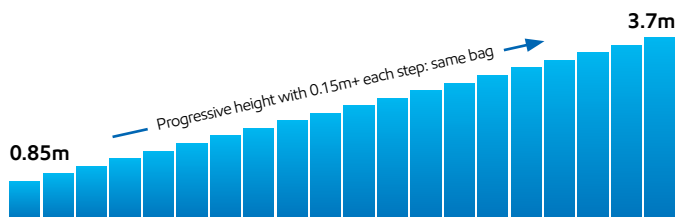
- polymers
- chemicals
- sugars
- cement
- pet foods
- rice and flour

Figure 2: Bag drop performance for block bottom bag

Average failure height ¹	Flat drop ²	Bottom patch drop ³ (m)
Reference	No break at max. height	1.35*
30% Vistamaxx 3588FL-based	No break at max. height	1.38*

* No failure occurred in seal area

** 50kg cement bag - no break after 20 times flat drop



¹ Calculated based on average of broken height of 10 bags

² Turned the bag around after each drop

³ No turning of the bag between each drop

Properties	Test method based on	Vistamaxx 3588FL	Vistamaxx 3980FL	Vistamaxx 6202
MFR (230°C/2.16kg) [g/10min]	ASTM D1238	8	8	20
Vicat softening point (°C)	ExxonMobil method	103	76.7	47.2

Test	Test method based on
Tensile Properties	EN ISO 13934 / DIN 53857
COF (film/film and film/metal)	ASTM D1894
Adhesion ¹	Third party method
Hot air temperature ¹	Third party method
Bag drop	DIN-EN 27965-1

¹ Data to be used only as comparative data

Contact us for more information:

exxonmobilchemical.com/vistamaxx

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. The composition of the products are unchanged, it is only the names that updated. We will be making these modifications over the next few months, through mid 2025, so you will see both old and new grade names highlighted during that time. Grade slate of Vistamaxx™ performance polymers will keep unchanged.

Want to see what's changed in our portfolio? Go to exxonmobilchemical.com/sptransform

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 their sustainability and business goals.



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