Vistamaxx™ performance polymers create new extrusion coating possibilities

Presented by:
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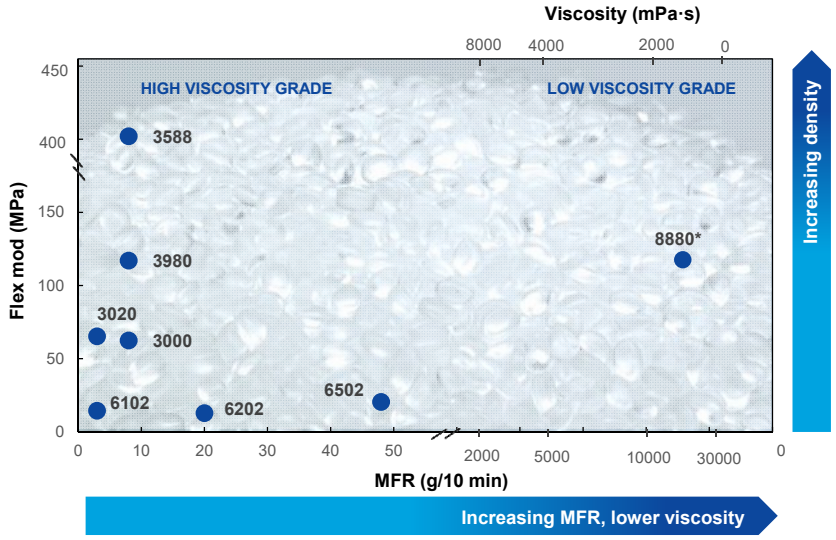
Vistamaxx™ performance polymers are …

- Semi-crystalline copolymers
  - Based on ExxonMobil proprietary metallocene technology
  - With tunable amorphous content
  - Compatible with other polyolefinic materials
  - Uniform inter and intramolecular composition and crystallinity distribution
- Production Capacity
  - >300kT with manufacturing in Singapore and US

Broad product portfolio



Test methods:
Flex mod based on ASTM D790
MFR based on ASTM D 1238 / ISO 1133

* 8880: MFR is estimated based on Viscosity
* 8880: Flex mod estimated based on polymer composition

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Expanding growth potential

Key attributes inspire innovative solutions

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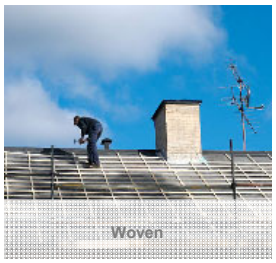
Vistamaxx™ - A truly versatile polymer and its co-extrusion possibilities

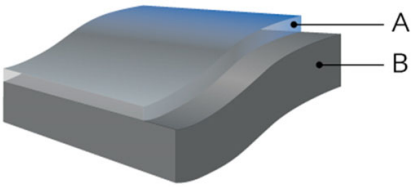


The key mechanisms:

- polymer chains diffusion into the substrate's surface
- chain entanglement
- crystallization
- formation of an entangled network across the materials Interface

Vistamaxx™ performance polymers in block bottom bag coating layer

Downgauging adds value



A. **Reference** coating layer - 25gsm
B. PP woven fabric - 60 gsm

A. **Vistamaxx 3588FL-based** coating layer - 17gsm
B. PP woven fabric - 60 gsm

Achieve excellent bag integrity with reduced sealing temperature and material cost

30%
coating weight downgauge

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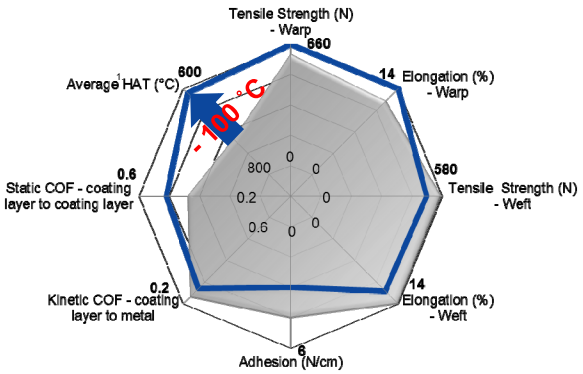
Data from tests performed by or on behalf of ExxonMobil

Vistamaxx 3588FL-based coating layer



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

Mechanical test data based on coated woven fabric without perforation
1. Average (optimum) hot air temperature for valve, cover and bottom patches based on bag conversion production (Starlinger testmethod)

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Vistamaxx 3588FL-based solution offers:

- **30% downgauging**
- **100˚C average HAT reduction**
- **Excellent bag drop performance**
- **Strong adhesion with 3N/cm**
- **Comparable COF enables good machinability**
- **Excellent processability**

Data from tests performed by or on behalf of ExxonMobil

Vistamaxx™ performance polymers

Vistamaxx™ performance polymers provides …

- adhesion to non polar substrates
- adhesive properties to PE, PP, PET, paper, porous structures and others
- excellent sealing properties
- very low seal initiation temperature
- combined adhesion and sealing
- good processing on conventional extrusion coating equipment
- softness
- antislip
- elasticity

Vistamaxx™ is a polyolefin material that can be coextruded or blended with PE, PP and/or other polyolefins

Thank you

for your attention

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Test methods

Test	Test method based upon
Melt Flow Rate : Davenport - Model	ASTM D1238
Vicat Softening Point (˚C)	ExxonMobil Method
Rheology	ExxonMobil Method
Tensile Properties	EN ISO 13934 / DIN 53857
Seal strength	ASTM F2029
Seal strength on welded bottom	EN ISO 13934 / DIN 53857
COF (film/film and film/metal)	ASTM D1894
Adhesion[1]	Starlinger method
Hot air temperature[1]	Starlinger method
Bag drop	DIN-EN 27965-1

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