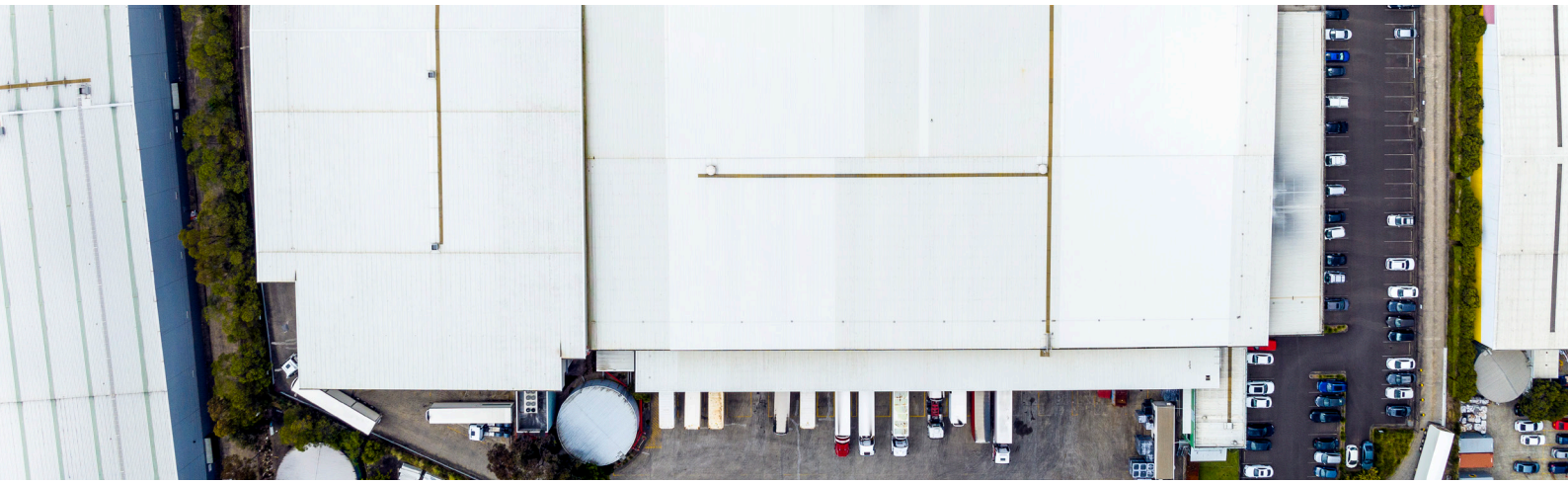
ExxonMobil
Signature Polymers

Factsheet



Vistamaxx™ performance polymer

Tough to protect it all: Vistamaxx™ Tough T1600 performance polymer for the TPO roofing industry

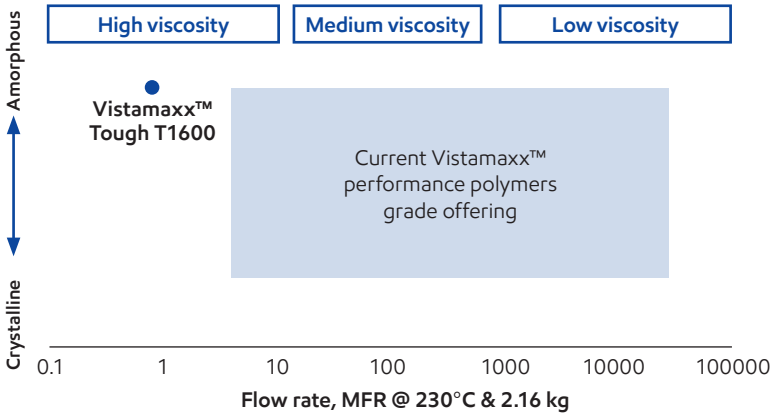
Better processing

Formulation design flexbility

Dispersion

Flexibility

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



Attributes of new grade compared with current Vistamaxx portfolio

- Lower MFR optimized for extrusion and calendering process
- Higher melt strength for dimensional and bubble stability in blown film
- Higher toughness for excellent impact resistance & workability

Potential application field

- Customized PP blends as reactor TPO alternatives
- Artificial leather
- PPR pipe
- IV bag & tube
- Foamed sports floor underlayer

Data from tests performed by or on behalf of ExxonMobil

Mechanical properties of monolayer TPO membrane

Vistamaxx™ Tough T1600/ExxonMobil™ PP blend at 47/20 showed

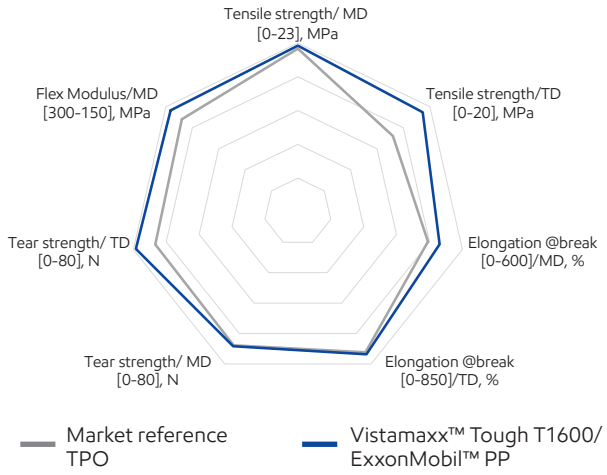
- Lower flex modulus
- More consistent tensile strength in MD and TD directions

Composition, wt%	Market reference TPO	Vistamaxx™ Tough T1600 / ExxonMobil PP7032E3
Market reference TPO	67	/
Vistamaxx™ Tough T1600	/	47
ExxonMobil™ PP	/	20
$Mg(OH)_2$	30	30
Additives*	3	3

*Additives including anti-oxidant and UV stabilizer

Processing observation:

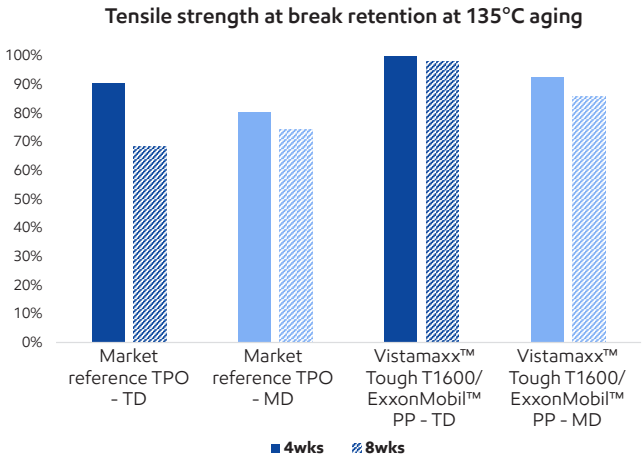
Barrel temperature of market reference TPO set higher (~ 210°C) than Vistamaxx/ExxonMobil™ PP blends (~195°C) due to lower MFR of market reference

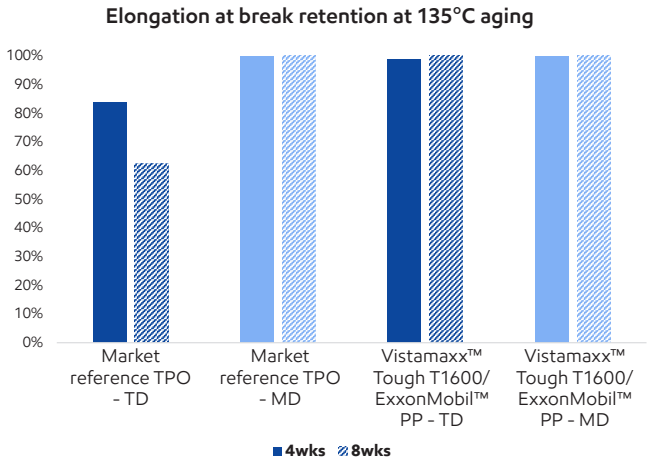


- Monolayer TPO membrane made on pilot line of in-line twin-screw compounding & calendering line
- Membrane thickness: 1.2mm, width: 700mm

Data traceability: LIMS # R2407-021745

Blends of Vistamaxx™ Tough T1600/ExxonMobil™ PP showed higher tensile strength and elongation retention after heat aging for 4 weeks and 8 weeks than market reference TPO





TD: Transverse Direction
MD: Machine Direction

Data traceability: LIMS #: R2506-028303

Test item	Test method based on
Tensile property	ExxonMobil method
Tear strength	ExxonMobil method
Flexural modulus	ExxonMobil method
Ageing - tensile property	GB27789-2011 (tested by 3rd party)

Data from tests performed by or on behalf of ExxonMobil

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