

Exxelor™ PO 1020

Polymer Resin

Product Description

Exxelor PO 1020 polymer resin is a high performance maleic anhydride functionalized homopolypropylene produced by reactive extrusion. It has been primarily designed to add polarity to polypropylene matrices and in particular to improve polypropylene reactivity with amino-silane treated glass reinforcements. Its high content of maleic anhydride allows its use at low treat levels while maintaining optimum application properties.

This grade is designed to:

- Function as a coupling agent between reinforcing materials, such as glass fibers and inorganic fillers, and polypropylene.
- Achieve compatibility in polypropylene/polyamide alloys.
- Achieve compatibility between polyolefins and more polar polymers that are capable of interacting with maleic anhydride for alloying, recycling or co-extrusion purposes.
- Improve polypropylene-to-metal adhesion properties.

Key Features

Performance enhancements in glass-filled polypropylene:

- Improved cost/performance balance compared to earlier generation modifiers.
- Easy molding of highly glass-filled compounds and/or complex and thin parts due to its high flow properties.
- Outstanding unnotched Izod and Charpy impact performance.
- Excellent notched Izod and Charpy impact resistance.
- Improved tensile and flexural strength.

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.900 g/cm ³	0.900 g/cm ³	ExxonMobil Method
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/1.2 kg	110 g/10 min	110 g/10 min	
230°C/2.16 kg	430 g/10 min	430 g/10 min	
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/1.2 kg	110 g/10 min	110 g/10 min	
230°C/2.16 kg	430 g/10 min	430 g/10 min	
Maleic Anhydride Graft Level ²	High	High	FTIR EPK-04 QT-02
Volatiles	< 0.30 %	< 0.30 %	AM-S 350.03
Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Peak Melting Temperature	324 °F	162 °C	ExxonMobil Method
Optical	Typical Value (English)	Typical Value (SI)	Test Based On
Yellowness Index	< 30 YI	< 30 YI	ASTM E313

