ExxonMobil

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.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Revision Date	▪ 12/20/2012		

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.900	g/cm³	0.900	g/cm³	ExxonMobil Method
Melt Mass-Flow Rate (MFR)					ASTM D1238
190°C/1.2 kg	112	g/10 min	112	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	112	g/10 min	112	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

Additional Information

Storage and Handling: Comprehensive material safety data sheets are provided to recommend safe practices during usage. For easy handling and storage, this grade is supplied as free-flowing pellets normally packed in 25 kg bags (50 bags per pallet), 450 kg octabins or 1 ton supersacks.

Legal Statement

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use. For detailed Product Stewardship information, please contact Customer Service.

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Processing Statement

Exxelor PO 1020 resin can be added to polypropylene to achieve optimum dispersion within the glass-reinforced matrix in order to obtain the best performance. Compounding parameters that can lead to optimized performance include extruder type, screw design, barrel temperature, screw speed, throughput, residence time and material feeding sequence. Our experienced technical service engineers and chemists are always on hand to help you in achieving the best performance from your processing and compounding operations.

Notes

Typical properties: these are not to be construed as specifications.

[1] Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

[2] MA level is typically in the range of 0.5 to 1.0 wt%.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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