ExxonMobil Signature Polymers

Exact™ 5101MX

Ethylene-based Plastomer Resin

Product Description

Exact™ 5101MX plastomer resin is an ethylene 1-octene copolymer produced using a proprietary metallocene technology. It exhibits outstanding plastic and elastomeric properties including superior toughness. Exact™ 5101MX is designed for modification of polypropylene and polyethylene in a wide range of applications such as injection molding, extrusion blow molding, blown and cast film, and profile extrustion.

Key Features

- Premium low temperature impact modifier
- Free-flowing pellets
- Superior toughness and tear strength

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Applications	▪ Compounding and TPO ▪ General purpose elastomer	▪ Injection Molding ▪ Polymer Modification	▪ Shoe sole, foam, and footwear
Form(s)	▪ Pellets		
Revision Date	▪ 02/15/2023		

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.900	g/cm³	0.900	g/cm³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	1.1	g/10 min	1.1	g/10 min	ASTM D1238

Hardness	Typical Value (English)		Typical Value (SI)		Test Based On
Durometer Hardness					
Shore A, 15 sec	91		91		ASTM D2240
Shore D, 15 sec	39		39		ExxonMobil Method

Mechanical	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Stress at 100%	970	psi	6.7	MPa	ExxonMobil Method
Tensile Stress at 300%	1100	psi	7.6	MPa	ExxonMobil Method
Elongation at Break [2] (2.0 in/min (50 mm/min))	> 800	%	> 800	%	ExxonMobil Method
Flexural Modulus - 1% Secant	9900	psi	68	MPa	ExxonMobil Method

Elastomers	Typical Value (English)		Typical Value (SI)		Test Based On
Tear Strength (Die C)	431	lbf/in	75.5	kN/m	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	195	°F	90.6	°C	ExxonMobil Method
Peak Melting Temperature	198	°F	92	°C	ExxonMobil Method

Legal Statement

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

Processing Statement

Tensile testing was conducted at a crosshead speed of 2 in/min.

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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] All specimens reached extension limit, did not break.

For additional technical, sales and order assistance: Contact Us

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