

# Exact™ 5171

# Ethylene-based Plastomer Resin

# **Product Description**

Exact<sup>™</sup> 5171 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<sup>™</sup> 5171 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 extrusion.

# **Key Features**

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

General  Availability <sup>1</sup>	<ul> <li>Africa &amp; Middle East</li> </ul>		<ul> <li>Europe</li> </ul>	North A	∆merica
, wandomey	Asia Pacific		Latin America	- North America	
	<ul> <li>Compounding and TPO</li> </ul>		<ul> <li>Injection Molding</li> </ul>	<ul> <li>Shoe sole, foam, and footwea</li> </ul>	
	<ul> <li>General purpose elas</li> </ul>	stomer	<ul> <li>Polymer Modification</li> </ul>		
Form(s)	<ul> <li>Pellets</li> </ul>				
Revision Date	<b>1</b> 0/22/2020				
Physical	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density		g/cm³		g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg	g) 2.3	g/10 min	2.3	g/10 min	ASTM D1238
Hardness	Typical Value	(English)	Typical Value	(SI)	Test Based On
Durometer Hardness					ExxonMobil
Shore A	70		70		Method
Shore D	19		19		
Mechanical	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Stress <sup>2</sup>	> 1200	psi	> 8.1	MPa	ExxonMobil Method
Tensile Stress at 100% (73°F (23°C))	350	psi	2.4	MPa	ExxonMobil Method
Elongation at Break <sup>2</sup>	> 800	%	> 800	%	ExxonMobil Method
Flexural Modulus - 1% Secant	2000	psi	14	MPa	ExxonMobil Method
Elastomers	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Stress at 300% (73°F (23°C))	476	psi	3.28	MPa	ExxonMobil Method
Tear Strength (Die C)	204	lbf/in	35.8	kN/m	ExxonMobil Method
Mooney Viscosity (ML 1+4, 257°F (125°C))	18	MU	18	MU	ExxonMobil Method
- hermal	Typical Value	(English)	Typical Value	(SI)	Test Based On
Vicat Softening Temperature	130	_	54.4		ExxonMobil Method
Peak Melting Temperature	132	°F	56	°C	ExxonMobil Method
Additional Information					
This product is talc dusted.					

Effective Date: 10/22/2020 ExxonMobil Page: 1 of 2



# Exact<sup>™</sup> 5171 Ethylene-based Plastomer Resir

#### Legal Statement

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

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

#### **Processing Statement**

Tensile testing was conducted at a crosshead speed of 20 in/min.

Physical properties were measured on compression molded specimens.

#### Notes

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

- <sup>1</sup> Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.
- <sup>2</sup> All specimens reached extension limit, did not break.

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

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