

Exact™ 5171

Ethylene-based Plastomer Resin

Product Description		Key Features		
<p>Exact™ 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™ 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.</p>		<ul style="list-style-type: none"> Premium low temperature impact modifier Free-flowing pellets Superior toughness and tear strength 		
General				
Availability ¹	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America 	
Applications	<ul style="list-style-type: none"> Compounding and TPO General purpose elastomer 	<ul style="list-style-type: none"> Injection Molding Polymer Modification 	<ul style="list-style-type: none"> Shoe sole, foam, and footwear 	
Form(s)	<ul style="list-style-type: none"> Pellets 			
Revision Date	<ul style="list-style-type: none"> 10/22/2020 			
Physical				
	Typical Value (English)	Typical Value (SI)	Test Based On	
Density	0.868 g/cm ³	0.868 g/cm ³	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)	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 Method	
Shore A	70	70		
Shore D	19	19		
Mechanical				
	Typical Value (English)	Typical Value (SI)	Test Based On	
Tensile Stress ²	> 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 ²	> 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	
Thermal				
	Typical Value (English)	Typical Value (SI)	Test Based On	
Vicat Softening Temperature	130 °F	54.4 °C	ExxonMobil Method	
Peak Melting Temperature	132 °F	56 °C	ExxonMobil Method	
Additional Information				
This product is talc dusted.				

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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.

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.

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