

Exact™ 4151 Blown

Ethylene-based Plastomer Resin

Product Description

Exact 4151 is an ethylene-based hexene plastomer produced using ExxonMobil Chemical's EXXPOL® Catalyst Technology. Exact 4151 is designed for both monolayer and multilayer coextruded cast and blown film applications requiring low sealing temperatures, high oxygen transmission and high toughness. Typical applications include seal layers for lamination films used in meat, poultry and produce packaging.

General

Availability ¹	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Blown Film	▪ Lamination Film	
Form(s)	▪ Pellets		
Revision Date	▪ 01/01/2017		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.895 g/cm ³	0.895 g/cm ³	ASTM D1505
Melt Index ² (190°C/2.16 kg)	2.2 g/10 min	2.2 g/10 min	ASTM D1238
Peak Melting Temperature	191 °F	88 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	168 °F	75.6 °C	ExxonMobil Method
Crystallization Peak, T _c	158 °F	70 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	560 psi	3.9 MPa	ASTM D882
Tensile Strength at Yield TD	530 psi	3.7 MPa	ASTM D882
Tensile Strength at Break MD	9900 psi	70 MPa	ASTM D882
Tensile Strength at Break TD	10000 psi	70 MPa	ASTM D882
Elongation at Break MD	520 %	520 %	ASTM D882
Elongation at Break TD	650 %	650 %	ASTM D882
Secant Modulus MD	7800 psi	54 MPa	ASTM D882
Secant Modulus TD	8500 psi	59 MPa	ASTM D882
Dart Drop Impact	> 1300 g	> 1300 g	ASTM D1709A
Elmendorf Tear Strength MD	240 g	240 g	ASTM D1922
Elmendorf Tear Strength TD	330 g	330 g	ASTM D1922
Puncture Force	17 lbf	75 N	ExxonMobil Method
Puncture Energy	61 in·lb	6.9 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	59	59	ASTM D2457
Haze	5.7 %	5.7 %	ASTM D1003

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

Film (1.25 mil / 32 micron) made from Exact 4151 on a 2.5 inch blown film line having a 6 inch die with a 60 mil die gap at a 2.5:1 blow-up ratio and a melt temperature of 370-390°F (188-199°C).

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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 Value reported is an estimate based on ExxonMobil's correlation from melt flow rate data measured at other standard conditions, based on ASTM D 1238.

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

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