

Exact™ 3027

Ethylene-based Plastomer Resin

Product Description

EXACT 3027 is an ethylene-based butene plastomer produced using ExxonMobil Chemical's EXXPOL® Catalyst Technology. EXACT 3027 is designed for both monolayer and multilayer coextruded cast film applications requiring excellent toughness and heat sealing performance. Typical applications include seal layers for meat, poultry, and cheese packaging, lamination films, heavy duty bags, and cereal box liner packaging.

General

Availability ¹	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Cast Film	▪ Heavy Duty Bags	▪ Lamination Film
Form(s)	▪ Pellets		
Revision Date	▪ 03/01/2010		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.900 g/cm ³	0.900 g/cm ³	ASTM D1505
Melt Index ² (190°C/2.16 kg)	3.5 g/10 min	3.5 g/10 min	ASTM D1238
Peak Melting Temperature	196 °F	91 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	176 °F	80.0 °C	ExxonMobil Method
Crystallization Peak, T _c	165 °F	74 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	910 psi	6.2 MPa	ASTM D882
Tensile Strength at Yield TD	630 psi	4.4 MPa	ASTM D882
Tensile Strength at Break MD	8300 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	5200 psi	36 MPa	ASTM D882
Elongation at Yield MD	10 %	10 %	ASTM D882
Elongation at Yield TD	8 %	8 %	ASTM D882
Elongation at Break MD	490 %	490 %	ASTM D882
Elongation at Break TD	810 %	810 %	ASTM D882
Secant Modulus MD - 1% Secant	9700 psi	67 MPa	ASTM D882
Secant Modulus TD - 1% Secant	11000 psi	79 MPa	ASTM D882
Dart Drop Impact	120 g	120 g	ASTM D1709
Elmendorf Tear Strength MD	50 g	50 g	ASTM D1922
Elmendorf Tear Strength TD	230 g	230 g	ASTM D1922
Puncture Force	14 lbf	62 N	ExxonMobil Method
Puncture Energy	57 in-lb	6.5 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	94	94	ASTM D2457
Haze	0.4 %	0.4 %	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 mil / 25.4 micron) made from Exact 3027 on a 3.5 inch cast film line with a 5 inch melt curtain, 78°F (26°C) chill roll temperature at a 500 ft/min take-off speed and a melt temperature between 532-550°F (277-288°C).

Exact™ 3027
Ethylene-based Plastomer Resin**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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