

Exact™ 4151A Blown

Ethylene-based Plastomer Resin

Product Description

Exact™ 4151A is an ethylene-based hexene plastomer produced using ExxonMobil Chemical's EXXPOL® Catalyst Technology. Exact™ 4151A 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. TnPP is not intentionally added to Exact™ 4151A resin.

General

Availability ¹	▪ Latin America	▪ North America
Additive	▪ Antiblock: No	▪ Slip: No
Applications	▪ Blown Film	▪ Lamination Film
Form(s)	▪ Pellets	
Revision Date	▪ 10/23/2019	▪ Thermal Stabilizer: Yes

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

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

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).

Exact™ 4151A Blown Ethylene-based Plastomer Resin

Processing Statement

Film (1.25 mil / 32 micron) made 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).

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

©2022 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com