

Enable™ 3505RA

Performance Polymer

Product Description

Enable™ 3505RA resin is a medium density ethylene 1-hexene copolymer. Enable™ performance polymer resins offer an outstanding balance between processing and film properties, including tensile, impact and puncture. Easier processing and excellent properties lead to significant high pressure LDPE replacement in many applications, yet with superior drawdown and enhanced toughness. TnPP is not intentionally added to Enable™ 3505RA.

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
Additive	<ul style="list-style-type: none"> Antiblock: No Slip: No 	<ul style="list-style-type: none"> Thermal Stabilizer: Yes Alternative Processing Aid: Yes 	
Applications	<ul style="list-style-type: none"> Food Packaging Form Fill And Seal Packaging Heavy Duty Bags 	<ul style="list-style-type: none"> Lamination Film Multilayer Packaging Film Shrink Film 	<ul style="list-style-type: none"> Stand Up Pouches
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 03/20/2023 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.935 g/cm ³	0.935 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.50 g/10 min	0.50 g/10 min	ASTM D1238
Peak Melting Temperature	253 °F	123 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	246 °F	119 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	2400 psi	17 MPa	ASTM D882
Tensile Strength at Yield TD	2800 psi	20 MPa	ASTM D882
Tensile Strength at Break MD	8400 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	6700 psi	46 MPa	ASTM D882
Elongation at Break MD	550 %	550 %	ASTM D882
Elongation at Break TD	790 %	790 %	ASTM D882
Secant Modulus MD - 1% Secant	62000 psi	430 MPa	ASTM D882
Secant Modulus TD - 1% Secant	75000 psi	520 MPa	ASTM D882
Dart Drop Impact	70 g	70 g	ASTM D1709A
Elmendorf Tear Strength MD	20 g	20 g	ASTM D1922
Elmendorf Tear Strength TD	610 g	610 g	ASTM D1922
Puncture Force	11 lbf	48 N	ExxonMobil Method
Puncture Energy	20 in-lb	2.3 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	40	40	ASTM D2457
Haze	14 %	14 %	ASTM D1003

Enable™ 3505RA Performance Polymer

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).

Processing Statement

Film (1 mil / 25.4 micron) made on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 380- 400°F (193 - 204°C), a 30 mil (0.76 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

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.

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

©2024 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