

Enable™ 3505RA

Performance Polymer

Product Description

Enable™ 3505RA is a medium density ethylene 1-hexene copolymer resin. 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. Fluoropolymers, or fluorine-containing compounds, and TNPP are not intentionally added to Enable™ 3505RA.

General

Availability ¹	- Africa & Middle East - Asia Pacific	- Europe - Latin America	North America
Additive	- Antiblock: No - Slip: No	- Thermal Stabilizer: Yes - Alternative Processing Aid: Yes	
Applications	- Food Packaging - Form Fill And Seal Packaging - Heavy Duty Bags	- Lamination Film - Multilayer Packaging Film - Shrink Film	Stand Up Pouches
Form(s)	Pellets		
Revision Date	04/19/2024		

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**

Fluoropolymers, or fluorine-containing compounds, and tris(nonylphenol) phosphite (TNPP) CAS# 26523-78-4 are not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for their presence, based on product composition knowledge these substances are not expected to be present. However, the fact that these substances are not intentionally used by ExxonMobil in this product does not exclude that trace levels of these substances 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

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