

Enable™ 2305RA

Performance Polymer

Product Description

Enable™ 2305RA is an 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. Enable™ 2305 resins are available with and without antiblock. Fluoropolymers, or fluorine-containing compounds, and TNPP are not intentionally added to Enable™ 2305RA resins.

General

Availability ¹	▪ North America		
Additive	▪ Antiblock: No	▪ Thermal Stabilizer: Yes	▪ Alternative Processing Aid: Yes
Applications	▪ Agricultural Film	▪ Form Fill And Seal Packaging	▪ Shrink Film
	▪ Blown Film	▪ Heavy Duty Bags	▪ Stand Up Pouches
Form(s)	▪ Collation Shrink	▪ Lamination Film	
	▪ Food Packaging	▪ Multilayer Packaging Film	
Revision Date	▪ Pellets		
	▪ 04/19/2024		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.923 g/cm ³	0.923 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	241 °F	116 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	230 °F	110 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1600 psi	11 MPa	ASTM D882
Tensile Strength at Yield TD	1700 psi	12 MPa	ASTM D882
Tensile Strength at Break MD	8600 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	7600 psi	50 MPa	ASTM D882
Elongation at Break MD	480 %	480 %	ASTM D882
Elongation at Break TD	730 %	730 %	ASTM D882
Secant Modulus MD - 1% Secant	35000 psi	240 MPa	ASTM D882
Secant Modulus TD - 1% Secant	41000 psi	280 MPa	ASTM D882
Dart Drop Impact	170 g	170 g	ASTM D1709A
Elmendorf Tear Strength MD	70 g	70 g	ASTM D1922
Elmendorf Tear Strength TD	620 g	620 g	ASTM D1922
Puncture Force	12 lbf	51 N	ExxonMobil Method
Puncture Energy	29 in-lb	3.3 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	52	52	ASTM D2457
Haze	9.3 %	9.3 %	ASTM D1003

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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.

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.

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.

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