

Enable™ 2005RE

Performance Polymer

Product Description

Enable™ 2005RE 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 this superior drawdown and enhanced toughness. Fluoropolymers, or fluorine-containing compounds, and TNPP are not intentionally added to Enable™ 2005RE.

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: 2000 ppm Slip: 500 ppm 	<ul style="list-style-type: none"> Thermal Stabilizer: Yes Alternative Processing Aid: Yes 	
Applications	<ul style="list-style-type: none"> Agricultural Film Blown Film Cast Film Cast Stretch Film Collation Shrink 	<ul style="list-style-type: none"> Food Packaging Form Fill And Seal Packaging Heavy Duty Bags Lamination Film Multilayer Packaging Film 	<ul style="list-style-type: none"> Shrink Film Stand Up Pouches Stretch Film
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 04/19/2024 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.920 g/cm ³	0.920 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	239 °F	115 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	225 °F	107 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1400 psi	9.9 MPa	ASTM D882
Tensile Strength at Yield TD	1600 psi	11 MPa	ASTM D882
Tensile Strength at Break MD	8800 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	8000 psi	60 MPa	ASTM D882
Elongation at Break MD	480 %	480 %	ASTM D882
Elongation at Break TD	710 %	710 %	ASTM D882
Secant Modulus MD - 1% Secant	30000 psi	210 MPa	ASTM D882
Secant Modulus TD - 1% Secant	34000 psi	240 MPa	ASTM D882
Dart Drop Impact	240 g	240 g	ASTM D1709A
Elmendorf Tear Strength MD	90 g	90 g	ASTM D1922
Elmendorf Tear Strength TD	570 g	570 g	ASTM D1922
Puncture Force	12 lbf	54 N	ExxonMobil Method
Puncture Energy	33 in·lb	3.8 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	57	57	ASTM D2457
Haze	7.8 %	7.8 %	ASTM D1003

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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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