ExxonMobil

Enable™ 2005 Series

Performance Polymer

Product Description

Enable™ 2005 resins are ethylene 1-hexene copolymers. 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™ 2005 resins.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Additive	▪ Enable™ 2005MC: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes ▪ Enable™ 2005PA: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes ▪ Enable™ 2005ME: Antiblock: 2000 ppm; Slip: 500 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes		
Applications	▪ Agricultural Film ▪ Blown Film ▪ Cast Film ▪ Cast Stretch Film ▪ Collation Shrink	▪ Food Packaging ▪ Form Fill And Seal Packaging ▪ Heavy Duty Bags ▪ Lamination Film ▪ Multilayer Packaging Film	▪ Shrink Film ▪ Stand Up Pouches ▪ Stretch Film
Revision Date	▪ 06/03/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.920	g/cm³	0.920	g/cm³	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

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.

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.

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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