

Enable™ 20-05 Series

Metalocene Polyethylene Resin

Product Description

Enable 20-05 resins are metallocene ethylene-hexene copolymers. Enable mPE 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 20-05 resins are available with blown film formulations, with or without antiblock. A heavily stabilized formulation for cast film processing is also available.

General

Availability ¹	• Latin America	• North America	• South America
Additive	<ul style="list-style-type: none"> • Enable 20-05CB: Antiblock: No; Processing Aid: No; Slip: No; Thermal Stabilizer: Yes • Enable 20-05CH: Antiblock: No; Processing Aid: Yes; Slip: No; Thermal Stabilizer: Yes • Enable 20-05CE: Antiblock: 2000 ppm; Processing Aid: Yes; Slip: 500 ppm; Thermal Stabilizer: 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
Revision Date	• 2/2009		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.920 g/cm ³	0.920 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	0.50 g/10 min	0.50 g/10 min	ASTM D1238
Peak Melting Temperature	237 °F	114 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1450 psi	9.96 MPa	ASTM D882
Tensile Strength at Yield TD	1490 psi	10.3 MPa	ASTM D882
Tensile Strength at Break MD	9930 psi	68.5 MPa	ASTM D882
Tensile Strength at Break TD	7990 psi	55.1 MPa	ASTM D882
Elongation at Break MD	470 %	470 %	ASTM D882
Elongation at Break TD	720 %	720 %	ASTM D882
Secant Modulus MD - 1% Secant	28100 psi	193 MPa	ASTM D882
Secant Modulus TD - 1% Secant	31900 psi	220 MPa	ASTM D882
Dart Drop Impact	280 g	280 g	ASTM D1709A
Elmendorf Tear Strength MD	76 g	76 g	ASTM D1922
Elmendorf Tear Strength TD	550 g	550 g	ASTM D1922
Puncture Force	12.0 lbf	53.4 N	ExxonMobil Method
Puncture Energy	33.0 in-lb	3.73 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	60	60	ASTM D2457
Haze	8.1 %	8.1 %	ASTM D1003

Typical properties: these are not to be construed as specifications.

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ExxonMobil Chemical Enable™ 20-05 Series Metallocene Polyethylene Resin

Legal Statement

20-05 Series can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

ExxonMobil Polyethylene is not intended for use in medical applications.

Processing Statement

Film (1 mil / 25.4 micron) made from Enable 20-05CH on a blown film line equipped with a 2.5 inch screw, 30 mil (0.76 mm) die gap, 2.5:1 blow up ratio, 383 °F (195°C) melt temperature, 17 inch (432 mm) frostline and 10 lbs/die in/hr.

Notes

¹ Product may not be available in one or more countries in the identified Availability regions. Contact your Sales Representative for complete Country Availability.

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