

ENABLE™ mPE

ENABLE 27-05CH

ExxonMobil
Chemical

Product Description

Enable 27-05CH is a metallocene ethylene-hexene copolymer. 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.

General

Availability 1	• Africa & Middle East • Asia Pacific	• Latin America • North America	• South America
Additive	• Enable 27-05CH: Antiblock: No; Heat Stabilizer: Yes; Processing Aid: Yes; Slip: No		
Applications	• Blown Stretch Film • Food packaging • Heavy Duty Bags	• Lamination Film • Multilayer Packaging Film • Shipping Sacks	• Shrink Film • Stretch Film

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Index (190°C/2.16 kg)	0.50 g/10 min	0.50 g/10 min	ASTM D1238
Density	0.927 g/cm³	0.927 g/cm³	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1910 psi	13.1 MPa	ASTM D882
Tensile Strength at Yield TD	2070 psi	14.3 MPa	ASTM D882
Tensile Strength at Break MD	9120 psi	62.9 MPa	ASTM D882
Tensile Strength at Break TD	7080 psi	48.8 MPa	ASTM D882
Elongation at Break MD	510 %	510 %	ASTM D882
Elongation at Break TD	760 %	760 %	ASTM D882
Tensile Modulus MD - 1% Secant	43900 psi	303 MPa	ASTM D882
Tensile Modulus TD - 1% Secant	50400 psi	348 MPa	ASTM D882
Dart Drop Impact	120 g	120 g	ASTM D1709
Elmendorf Tear Strength MD	46 g	46 g	ASTM D1922
Puncture Energy	24.0 in-lb	2.71 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	52	52	ASTM D2457
Haze	10 %	10 %	ASTM D1003

Processing Statement

Film (1 mil / 25.4 micron) made from Enable 27-05CH on a 2.5 inch blown film line equipped with 2.5: 1 blow-up ratio, 30 mil die gap, 378°F melt temperature, 16 in frostline and 10 lbs/die in/hr.

Foodlaw & Medical Use Statement

ENABLE 27-05CH 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.

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

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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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