

# Enable™ 27-05HH

# Metallocene Polyethylene Resin

## **Product Description**

Enable 27-05HH 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 <sup>1</sup>	<ul> <li>Latin America</li> </ul>		<ul> <li>North America</li> </ul>			
Additive	<ul><li>Antiblock: No</li><li>Slip: No</li></ul>	<ul><li>Processing Aid: Yes</li><li>Thermal Stabilizer: Yes</li></ul>				
Applications	<ul><li>Blown Film</li><li>Collation Shrink</li><li>Food packaging</li></ul>		<ul><li>Form Fill And Seal Packagi</li><li>Heavy Duty Bags</li><li>Lamination Film</li></ul>	<ul><li>Shrink</li></ul>	lultilayer Packaging Film nrink Film tand Up Pouches	
Revision Date	<b>1</b> 2/01/2012					
Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On	
Density	0.927	g/cm³	0.927	g/cm³	ExxonMobil Method	
Melt Index (190°C/2.16 kg)	0.50	g/10 min	0.50	g/10 min	ASTM D1238	
Peak Melting Temperature	246	°F	119	°C	ExxonMobil Method	
Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On	
Tensile Strength at Yield MD	1900	psi	13	MPa	ASTM D882	
Tensile Strength at Yield TD	2100	psi	14	MPa	ASTM D882	
Tensile Strength at Break MD	8500	psi	60	MPa	ASTM D882	
Tensile Strength at Break TD	7300	psi	50	MPa	ASTM D882	
Elongation at Break MD	520	%	520	%	ASTM D882	
Elongation at Break TD	770	%	770	%	ASTM D882	
Secant Modulus MD - 1% Secant	43000	psi	300	MPa	ASTM D882	
Secant Modulus TD - 1% Secant	51000	psi	350	MPa	ASTM D882	
Dart Drop Impact	130	9	130	g	ASTM D1709A	
Elmendorf Tear Strength MD	50	g	50	g	ASTM D1922	
Elmendorf Tear Strength TD	730	9	730	9	ASTM D1922	
Puncture Force	11	lbf	48	N	ExxonMobil Method	
Puncture Energy	25	in·lb	2.8	J	ExxonMobil Method	
Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On	
Gloss (45°)	49		49		ASTM D2457	
Haze	11	%	11	%	ASTM D1003	

#### Legal Statement

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 from Enable 27-05HH on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 401 °F (205 °C), a 30 mil (0.76 mm) die gap at a rate of 10lbs/hr/in die circumference (1.79 kg/hr/cm).



### Enable™ 27-05HH Metallocene Polyethylene Resin

#### Notes

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

<sup>1</sup> 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

©2016 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Chemical" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com