

# Enable™ 4009MC Blown

## Performance Polymer

### **Product Description**

Enable 4009MC is a medium density ethylene 1-hexene copolymer that offers an outstanding balance between extrusion processing and film properties, including modulus, tensile, impact and puncture. TnPP is not intentionally added to Enable 4009MC.

General					
Availability <sup>1</sup>	<ul><li>Africa &amp; Middle East</li><li>Asia Pacific</li></ul>		<ul><li>Europe</li><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>Bread Bags</li><li>Compression Packaging</li></ul>		<ul><li>Hygiene film</li><li>Lami Tubes</li></ul>	<ul><li>Lamination Film</li><li>Monofilament</li></ul>	
Revision Date	• 05/22/2018				
Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density / Specific Gravity	0.938	g/cm³	0.938	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.90	g/10 min	0.90	g/10 min	ASTM D1238
Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	2600	psi	18	MPa	ASTM D882
Tensile Strength at Yield TD	3000	psi	21	MPa	ASTM D882
Tensile Strength at Break MD	8100	psi	60	MPa	ASTM D882
Tensile Strength at Break TD	6300	psi	43	MPa	ASTM D882
Elongation at Break MD	600	%	600	%	ASTM D882
Elongation at Break TD	830	%	830	%	ASTM D882
Secant Modulus MD - 1% Secant	74000	psi	510	MPa	ASTM D882
Secant Modulus TD - 1% Secant	86000	psi	590	MPa	ASTM D882
Dart Drop Impact	< 60	g	< 60	g	ASTM D1709
Elmendorf Tear Strength MD	20	9	20	g	ASTM D1922
Elmendorf Tear Strength TD	550	g	550	g	ASTM D1922
Puncture Force	8	lbf	35	N	ExxonMobil Method
Puncture Energy	8.7	in·lb	0.98	J	ExxonMobil Method
Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	35		35		ASTM D2457
Haze	19	%	19	%	ASTM D1003

## Legal Statement

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.

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use. For detailed Product Stewardship information, please contact Customer Service.

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 4009MC 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.

<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.

Effective Date: 05/22/2018 ExxonMobil Page: 1 of 2



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### For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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