

## **DOW™ LLDPE MP 1888.11 Copolymer Linear Low Density Polyethylene Resin**

Overview

• Octene Copolymer

• Linear Low Density Polyethylene • For high speed blown film applications

• Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.

**Additive** 

Antiblock: 5555 ppm

• Slip: 1000 ppm

· Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.926	g/cm³	0.926	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	1.6	g/10 min	1.6	g/10 min	ASTM D1238
Films	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Film Thickness - Tested	2	mil	51	μm	
Film Puncture Resistance (2.0 mil (51 µm))	43.0	ft·lb/in³	3.56	J/cm³	Dow Method
Film Toughness					ASTM D882
MD : 2.0 mil (51 μm)	3100	ft·lb/in³	256	J/cm³	
TD : 2.0 mil (51 µm)	2910	ft·lb/in³	241	J/cm³	
Secant Modulus					ASTM D882
2% Secant, MD : 2.0 mil (51 μm)	27900	psi	192	MPa	
2% Secant, TD : 2.0 mil (51 μm)	35700	psi	246	MPa	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (51 μm)	1760	psi	12.1	MPa	
TD : Yield, 2.0 mil (51 μm)	1860	psi	12.8	MPa	
MD : Break, 2.0 mil (51 μm)	5640	psi	38.9	MPa	
TD : Break, 2.0 mil (51 μm)	4740	psi	32.7	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (51 μm)	750	%	750	%	
TD : Break, 2.0 mil (51 μm)	770	%	770	%	
Dart Drop Impact (2.0 mil (51 µm))	170	g	170	g	ASTM D1709B
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (51 μm)	800	g	800	g	
TD : 2.0 mil (51 µm)	1200	g	1200	g	
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Vicat Softening Temperature	226	°F	108	°C	ASTM D1525
Melting Temperature (DSC)	252	°F	122	°C	Dow Method
Optical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Gloss (45°, 2.00 mil (50.8 µm))	51		51		ASTM D2457
Haze (2.00 mil (50.8 μm))	17.0	%	17.0	%	ASTM D1003
Extrusion	Nominal Value	(English)	Nominal Value	(SI)	
Melt Temperature	395 to 420	°F	202 to 216	°C	

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#### **Extrusion Notes**

Fabrication Conditions For Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 24:1 L/D
- Screw Type: MC-4 with Maddock Mixer
- Die Gap: 40 mil (1.0 mm)
- Melt Temperature: 395-420°F (202-216°C)
- Output: 7 lb/hr/in. of die circumference
- Die Diameter: 6 in.Blow-Up Ratio: 2.5:1Screw Speed: 50 rpm
- Frost Line Height: 15 in. (381 mm)
- Haul Off Speed: 75 fpm (23 m/min)

### **Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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Published: 2009-04-29

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Form No. 400-00126910en

Rev: 2011-05-09