

# DOWLEX™ 2645.11G

Polyethylene Resin  
The Dow Chemical Company

# PROSPECTOR®

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## Technical Data

### Product Description

DOWLEX™ Polyethylene Resin is designed for the production of a wide variety of film applications. Films made from this resin exhibit a combination of good toughness and tear resistance.

Complies with:

- U.S. FDA, FCN 1539
- EU, No 10/2011
- Consult the regulations for complete details.

### General

Material Status	• Commercial: Active		
Literature <sup>1</sup>	• <a href="#">Technical Datasheet</a>		
Search for UL Yellow Card	• <a href="#">The Dow Chemical Company</a>		
Availability	• Asia Pacific	• Latin America	
Additive	• Antiblock: 3000 ppm	• Processing Aid: No	• Slip: 1200 ppm
Agency Ratings	• EU No 10/2011	• FDA FCN 1539	
Forms	• Pellets		
Processing Method	• Blown Film		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.923	0.921 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.90 g/10 min	0.90 g/10 min	ASTM D1238

Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.0 mil	51 µm	
Film Puncture Resistance (2.0 mil (51 µm))	80.0 ft·lb/in <sup>3</sup>	6.62 J/cm <sup>3</sup>	Internal Method
Secant Modulus			ASTM D882
2% Secant, MD : 2.0 mil (51 µm)	24400 psi	168 MPa	
2% Secant, TD : 2.0 mil (51 µm)	34500 psi	238 MPa	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (51 µm)	2060 psi	14.2 MPa	
TD : Yield, 2.0 mil (51 µm)	2120 psi	14.6 MPa	
MD : Break, 2.0 mil (51 µm)	7080 psi	48.8 MPa	
TD : Break, 2.0 mil (51 µm)	5680 psi	39.2 MPa	
Tensile Elongation			ASTM D882
MD : Break, 2.0 mil (51 µm)	660 %	660 %	
TD : Break, 2.0 mil (51 µm)	740 %	740 %	
Dart Drop Impact (2.0 mil (51 µm))	300 g	300 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 2.0 mil (51 µm)	720 g	720 g	
TD : 2.0 mil (51 µm)	1000 g	1000 g	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	225 °F	107 °C	ASTM D1525
Melting Temperature (DSC)	248 °F	120 °C	Internal Method

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 2.00 mil (50.8 µm))	56	56	ASTM D2457
Haze (2.00 mil (50.8 µm))	14 %	14 %	ASTM D1003



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#### Extrusion Notes

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##### Fabrication Conditions For Blown Film:

- Screw Size: 2.5 in. (63.5 mm) 30:1L/D
- Screw Type: DSBII
- Die Gap: 70 mil (1.8 mm)
- Output: 10 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5 : 1

#### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

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Where to Buy

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Supplier

**The Dow Chemical Company**  
Midland, MI USA  
**Telephone:** 800-441-4369  
**Web:** <http://plastics.dow.com/>

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Distributor

**RESINEX Group**  
*RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.*  
**Telephone:** +32-14-672511  
**Web:** <http://www.resinex.com/>  
**Availability:** Europe

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Reseller

A Reseller is not a distributor authorized by the Supplier.

**Shanghai Jingyang New Material Technology Co., Ltd**  
**Telephone:** +86-021-80394788; Mr. Zhou: +86-15821998203  
**Web:** <http://www.basfppsu.com/>  
**Availability:** Asia Pacific, China

