



DOWLEX 2645G

Polyethylene Resin

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.

Main Characteristics

- Linear Low Density Polyethylene
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a. Consult the regulations for complete details.

Properties ⁽¹⁾		English	S.I.
Typical Physical		Test Method	
Melt Index, (I ₂) at 190°C/2.16 kg, g/10 min		ASTM D 1238	
Density, g/cm ³		0.9	0.9
DSC Melting Point, °F (°C)		ASTM D 792	0.919
Vicat Softening Point, °F (°C)		Dow Method	248
		ASTM D 1525	120
			107
Film, 2.0 mil (51µm)			
Puncture Resistance, ft-lbf/in ³ (J/cm ³)		Dow Method	
Dart Impact, g		201	17
Method A		ASTM D 1709	
Elmendorf Tear (Method B), g		303	303
	MD	ASTM D 1922	722
	CD		1,019
Tensile Yield, psi (MPa)		ASTM D 882	2,058
	MD		14
	CD		2,119
Ultimate Tensile, psi (MPa)		ASTM D 882	7,083
	MD		49
	CD		5,679
Ultimate Elongation, %		ASTM D 882	622
	MD		622
	CD		736
Tensile Modulus, 2% Secant, psi (MPa)		ASTM D 882	24,398
	MD		170
	CD		34,499
Gloss, 45°		ASTM D 2457	63
Haze, %		ASTM D 1003	12

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

(1) 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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- c. use as a critical component in medical devices that support or sustain human life; or
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Additional Information

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