

Technical Data Sheet

DOWLEX™ 2740G (Blown Film) Polyethylene Resin

Description

DOWLEX™ 2740G Polyethylene Resin is suitable for the production of high modulus blown film. The resin offers excellent optical properties and good tear and impact strength and can be used to enable the reduction in gauge of various film structures.

Applications

Various industrial, consumer and specialty films.

Complies with

U.S. FDA 21 CFR 177.1520

EU No 10/2011

Consult the regulations for complete details.

Additive

Antiblock: No Processing aid: No

Slip: No

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method ²
Density ³	0.940	g/cm³	ASTM D792
Melt Index ³ (190°C/2.16 kg)	1.0	g/10 min	ISO 1133
Films			
Film Thickness - Tested	50	μm	
Film Puncture Energy ⁴ (2.0 mil (50 µm))	2.00	J	ASTM D5748
Film Puncture Force ⁴ (2.0 mil (50 µm))	46.0	N	ASTM D5748
Film Puncture Resistance ⁴ (2.0 mil (50 µm))	4.0	J/cm ³	ASTM D5748
Tensile Modulus ⁴			ISO 527-3
2% Secant, MD: 2.0 mil (50 μm)	370	MPa	
2% Secant, TD: 2.0 mil (50 μm	420	MPa	
Tensile Stress ⁴			ISO 527-3
MD: Yield, 2.0 mil (50 μm)	26.0	MPa	
TD: Yield, 2.0 mil (50 µm)	25.0	MPa	
MD: Break, 2.0 mil (50 μm)	44.0	MPa	
TD: Break, 2.0 mil (50 µm)	43.0	MPa	

Typical properties: these are not to be construed as specifications.
 ASTM: American Society for Testing and Materials

ISO: International Standardization Organization

Compression Molded.

Blown film extruded at 235°C, 50 microns, 2.5 BUR, 1.5 mm die gap.

ASTM & ISO Properties (Cont.)

Films	Nominal Value	Unit	Test Method
Tensile Elongation ⁴			ISO 527-3
MD: Break, 2.0 mil (50 µm)	690	%	
TD: Break, 2.0 mil (50 µm)	740	%	
Dart Drop Impact ⁴ (2.0 mil (25 µm))	120	g	ISO 7765-1/A
Elmendorf Tear Strength ⁴			ASTM D1922
MD: 2.0 mil (50 µm)	130	g	
TD: 2.0 mil (50 µm)	240	g	
Thermal			
Vicat Softening Temperature ³	125	°C	ASTM D1525
Extrusion		_	_
Melt Temperature	190 to 240	°C	
Futuraian Natas			

Extrusion Notes

Fabrication Conditions for Blown Film Resin:

• Die gap: 1.6 to 2.5 mm

Melt Temperature: 190 to 240°CBlow-Up Ratio: 1.5 to 3.5

Recommended Gauge Range: 10 to 150 μm.

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