



DOWLEX™ 2035 Polyethylene Resin

Overview

- Linear Low Density Polyethylene
- Outstanding tear strength, impact strength and toughness
- For high performance cast film applications
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.
- Complies with Canadian HPFB No Objection (With Limitations)
- Complies with U.S. FDA-DMF
- Complies with U.S. FDA-U.S. USP
- Complies with Europe EU-Directive 2002/72/EC (See Notes)
- Complies with Japan Hygienic Olefin and Styrene Plastics Association
- Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.919 g/cm ³	0.919 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	6.0 g/10 min	6.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.00 mil	25.4 µm	
Film Puncture Resistance	129 ft-lb/in ³	10.7 J/cm ³	Dow Method
Film Toughness			ASTM D882
MD: 1.00 mil (25.4 µm)	1580 ft-lb/in ³	131 J/cm ³	
TD: 1.00 mil (25.4 µm)	1590 ft-lb/in ³	132 J/cm ³	
Tensile Strength			ASTM D882
MD: Yield, 1.00 mil (25.4 µm)	1610 psi	11.1 MPa	
TD: Yield, 1.00 mil (25.4 µm)	1510 psi	10.4 MPa	
MD: Break, 1.00 mil (25.4 µm)	7410 psi	51.1 MPa	
TD: Break, 1.00 mil (25.4 µm)	5270 psi	36.3 MPa	
Tensile Elongation			ASTM D882
MD: Break, 1.00 mil (25.4 µm)	610 %	610 %	
TD: Break, 1.00 mil (25.4 µm)	770 %	770 %	
Dart Drop Impact (1.00 mil (25.4 µm))	140 g	140 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD: 1.00 mil (25.4 µm)	270 g	270 g	
TD: 1.00 mil (25.4 µm)	610 g	610 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	208 °F	97.8 °C	ASTM D1525
Melting Temperature (DSC)	255 °F	124 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.00 mil (25.4 µm))	96	96	ASTM D2457
Haze (1.00 mil (25.4 µm))	0.80 %	0.80 %	ASTM D1003

Extrusion Notes

Fabrication Conditions For Cast Film:

- Screw Size: 3.5 in. (89 mm); 32:1 L/D
- Screw Type: Sterlex
- Melt Temperature: 510°F (266°C)
- Screw Size: 2.5 in. (63.5 mm); 24:1 L/D
- Screw Type: Single Flight with Maddock Mixer
- Melt Temperature: 517°F (269°C)
- Screw Size: 2.0 in. (51 mm); 32:1 L/D
- Screw Type: DS with Single Flight
- Melt Temperature: 508°F (264°C)
- Chill Roll Temperature: 70°F (21°C)
- Line Speed: 500 fpm (152 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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