



DOWLEX™ 2035

The Dow Chemical Company - Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- 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 EU, No 10/2011
- Complies with Japan Hygienic Olefin and Styrene Plastics Association
- Consult the regulations for complete details.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• North America	
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• DMF Unspecified Rating • EU No 10/2011	• FDA 21 CFR 177.1520(c) 3.2a • HPFB (Canada) No Objection ¹	• JHOSPA Unspecified Rating • USP Unspecified Rating
Forms	• Pellets		
Processing Method	• Blown Film	• Cast Film	

ASTM & ISO Properties²

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.921		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Film Puncture Resistance	129	ft-lb/in ³	Internal Method
Film Toughness - MD (1.0 mil)	1580	ft-lb/in ³	ASTM D882
Film Toughness - TD (1.0 mil)	1590	ft-lb/in ³	ASTM D882
Tensile Strength - MD (Yield, 1.0 mil)	1610	psi	ASTM D882
Tensile Strength - TD (Yield, 1.0 mil)	1510	psi	ASTM D882
Tensile Strength - MD (Break, 1.0 mil)	7410	psi	ASTM D882
Tensile Strength - TD (Break, 1.0 mil)	5270	psi	ASTM D882
Tensile Elongation - MD (Break, 1.0 mil)	610	%	ASTM D882
Tensile Elongation - TD (Break, 1.0 mil)	770	%	ASTM D882
Dart Drop Impact (1.0 mil)	140	g	ASTM D1709A
Elmendorf Tear Strength - MD (1.0 mil)	270	g	ASTM D1922
Elmendorf Tear Strength - TD (1.0 mil)	610	g	ASTM D1922
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	208	°F	ASTM D1525
Melting Temperature (DSC)	255	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 1.00 mil)	96		ASTM D2457

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Optical	Nominal Value	Unit	Test Method
Haze (1.00 mil)	0.800	%	ASTM D1003

Processing Information

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

¹ With limitations

² Typical properties: these are not to be construed as specifications.