



DOWLEX™ 2047G

The Dow Chemical Company - Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- Linear Low Density Polyethylene
- For high performance stretch film applications
- Outstanding tear strength, impact strength and toughness

Complies with:

- U.S. FDA, FCN 424
- EU, No 10/2011

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	• EU No 10/2011 • FDA FCN 424
Forms	• Pellets
Processing Method	• Cast Film

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.919		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	2.3	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Film Puncture Resistance (0.80 mil)	267	ft-lb/in ³	Internal Method
Film Toughness - MD (0.80 mil)	2130	ft-lb/in ³	ASTM D882
Film Toughness - TD (0.80 mil)	2060	ft-lb/in ³	ASTM D882
Tensile Strength - MD (Yield, 0.80 mil)	1280	psi	ASTM D882
Tensile Strength - TD (Yield, 0.80 mil)	1180	psi	ASTM D882
Tensile Strength - MD (Break, 0.80 mil)	7270	psi	ASTM D882
Tensile Strength - TD (Break, 0.80 mil)	4180	psi	ASTM D882
Tensile Elongation - MD (Break, 0.80 mil)	460	%	ASTM D882
Tensile Elongation - TD (Break, 0.80 mil)	650	%	ASTM D882
Dart Drop Impact (0.80 mil)	210	g	ASTM D1709A
Elmendorf Tear Strength - MD (0.80 mil)	340	g	ASTM D1922
Elmendorf Tear Strength - TD (0.80 mil)	510	g	ASTM D1922
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	208	°F	ASTM D1525
Melting Temperature (DSC)	252	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 0.800 mil)	95		ASTM D2457
Haze (0.800 mil)	0.400	%	ASTM D1003

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Processing Information

Extrusion Notes

Fabrication Conditions For Cast Film:

- Screw Size: 2.0 in. (51 mm); 30:1 L/D
 - Melt Temperature: 524°F (273°C)
- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D
 - Melt Temperature: 525°F (274°C)
- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D
 - Melt Temperature: 525°F (274°C)
- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D
 - Melt Temperature: 524°F (273°C)
- Screw Size: 2.0 in. (51 mm); 30:1 L/D
 - Melt Temperature: 525°F (274°C)
- Chill Roll Temperature: 70°F (21°C)
- Screw Speed: 35 rpm
- Line Speed: 376 fpm (122 m/min)

Notes

- ¹ Typical properties: these are not to be construed as specifications.