DOWLEX™ 2645.11S

The Dow Chemical Company - Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOWLEX™ 2645.11S 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.

Complies with:

- U.S. FDA, FCN 741
- EU, No 10/2011

Consult the regulations for complete details.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Antiblock: 3000 ppm	• Processing Aid: No	• Slip: 1200 ppm
Agency Ratings	• EU No 10/2011	• FDA FCN 741	
Forms	• Pellets		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.923		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	0.90	g/10 min	ASTM D1238
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	2	mil	
Film Puncture Resistance (2.0 mil)	80.0	ft·lb/in³	Internal Method
Secant Modulus - 2% Secant, MD (2.0 mil)	24400	psi	ASTM D882
Secant Modulus - 2% Secant, TD (2.0 mil)	34500	psi	ASTM D882
Tensile Strength - MD (Yield, 2.0 mil)	2060	psi	ASTM D882
Tensile Strength - TD (Yield, 2.0 mil)	2120	psi	ASTM D882
Tensile Strength - MD (Break, 2.0 mil)	7080	psi	ASTM D882
Tensile Strength - TD (Break, 2.0 mil)	5680	psi	ASTM D882
Tensile Elongation - MD (Break, 2.0 mil)	660	%	ASTM D882
Tensile Elongation - TD (Break, 2.0 mil)	740	%	ASTM D882
Dart Drop Impact (2.0 mil)	300	g	ASTM D1709A
Elmendorf Tear Strength - MD (2.0 mil)	720	g	ASTM D1922
Elmendorf Tear Strength - TD (2.0 mil)	1000	g	ASTM D1922
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature	225	°F	ASTM D1525
Melting Temperature (DSC)	248	°F	Internal Method
Optical	**Nominal Value**	**Unit**	**Test Method**
Gloss (45°, 2.00 mil)	56		ASTM D2457
Haze (2.00 mil)	14.0	%	ASTM D1003

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Processing Information

Extrusion Notes

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

Notes

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