

AFFINITY™ PL 1280G Polyolefin Plastomer

Overview

AFFINITY™ PL 1280G Polyolefin Plastomer is a Polyolefin Plastomer (POP) produced using INSITE™ Technology from Dow Plastics. It is specifically designed for use as a sealant layer in flexible structures for the packaging of meat and cheese, dry foods and consumer goods. Due to its excellent sealability at low temperatures, ultimate hot tack strength, optical properties and abuse resistance, it is particularly suitable for high speed form-fill-seal packaging machines.

Applications:

Cast Film

Complies with:

- Canadian HPFP No Objection
- Europe EU-Directive 2002/72/EC
- U.S. FDA FCN 424

Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.900 g/cm ³	0.900 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0 g/10 min	6.0 g/10 min	ISO 1133
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	0.984 mil	25.0 μm	
Tensile Stress			ISO 527-3 ¹
MD: Yield, 0.984 mil (25.0 μm)	841 psi	5.80 MPa	
TD: Yield, 0.984 mil (25.0 µm)	769 psi	5.30 MPa	
MD: Break, 0.906 mil (23.0 µm)	6960 psi	48.0 MPa	
TD: Break, 0.906 mil (23.0 µm)	4350 psi	30.0 MPa	
Tensile Elongation			ISO 527-3 ¹
MD: Break, 0.984 mil (25.0 µm)	470 %	470 %	
TD: Break, 0.984 mil (25.0 µm)	720 %	720 %	
Dart Drop Impact (0.984 mil (25.0 µm))	290 g	290 g	ISO 7765-1/B ¹
Elmendorf Tear Strength			ASTM D1922 1
MD: 0.984 mil (25.0 μm)	78 g	78 g	
TD: 0.984 mil (25.0 µm)	410 g	410 g	
Seal Initiation Temperature			Dow Method ²
0.984 mil (25.0 μm)	190 °F	88.0 °C	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	178 °F	81.0 °C	ASTM D1525
Melting Temperature	205 °F	96.0 °C	DSC
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (20°, 0.984 mil (25.0 μm))	91	91	ASTM D2457 1
Haze (0.984 mil (25.0 μm))	4.0 %	4.0 %	ISO 14782 ¹

Highlight testing machine.

Notes

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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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¹ Single layer cast film, extruded at 274°C, 0.5 mm die gap.

² Single layer cast film, extruded at 274°C, 0.5 mm die gap. Temperature required to reach 5.25 N/15 mm heat-seal strength.

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Additional Information

North America		Europe/Middle East	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+32-3-450-2240
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369	•	
Latin America		South Africa	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	Asia Pacific	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

www.dowplastics.com

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