



AFFINITY™ PL 1881G

Polyolefin Plastomer

AFFINITY™ PL 1881G 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. This resin contains slip and antiblocking additives

Note: When used unmodified for food contact applications, this resin will comply with the Federal Food, Drug, and Cosmetic Act as a food contact substance (FCN) as a result of a premarket notification with an effective date of October 7, 2004 under FCN 424. This notification allows for use of this product as articles or components of articles used in contact with all food types under Conditions of Use A through H, as described in U.S. FDA Table 2 of 21 CFR § 176.170(c). The composition of this product complies with the requirements for use in contact with food of the EU-Directive 2002/72/EC. Please contact your nearest Dow office regarding food contact compliance statements. The purchaser remains responsible for determining whether the use complies with all relevant regulations.

Physical Properties ⁽¹⁾	Unit	Test Method	Values
Melt Index, 190 °C/2.16 kg	g/10min	ISO 1133	1
Density	g/cm ³	ASTM D-792	0.904
Melting Point	°C	DSC	100
Vicat Softening Point	°C	ASTM D-1525	88
Film Properties, 50 µm thickness ^(1,2)	Unit	Test Method	Values
Puncture Resistance		ASTM D-5748	
Energy	J		1.6
Force	N		30
Dart Impact, (Method A)	g	ISO 7765-1	>2600
Elmendorf Tear	g	MD CD	580 770
Tensile Yield	MPa	MD CD	6.1 6.2
Ultimate Tensile	MPa	MD CD	44 47
Ultimate Elongation	%	MD CD	610 590
Tensile Modulus, 2% Secant	MPa	MD CD	70 70
Optical Properties			
Gloss 20°	units	ASTM D-2457	105
Haze	%	ISO 14782	3.6
Seal Initiation Temperature ⁽³⁾	°C	Dow Method	89

(1) Typical values, not to be construed as specifications limits.

(2) Monolayer blown film, extruded at 221 °C, BUR 2.5:1, 1.8 mm die gap.

(3) Temperature required to reach 5.25 N/15 mm heat-seal strength.

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- use in cardiac prosthetic devices regardless of the length of time involved; (Cardiac prosthetic devices include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices);
- use as a critical component in medical devices that support or sustain human life; or
- use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

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