AFFINITY™ PT 1450G1
Polyolefin Plastomer

Overview

- Monolayer and coextrusion coating for packaging applications
- Recommended for use with Oriented Polypropylene (OPP as a tie layer or sealant)
- Coextruded with PRIMACOR* polymer as a cost effective foil or PET sealant
- Complies with U.S. FDA
- Consult the regulations for complete details. (See NOTES)

AFFINITY™ PT 1450G1 Polyolefin Plastomer is produced via INSITE™ Technology. It is an ethylene alpha-olefin resin for monolayer and coextrusion coating that offers excellent low temperature seal initiation, ultimate seal strength, adhesion to (OPP) and good taste and odor performance.

Note: It is the responsibility of the manufacturer of the food contact article to ensure the article is suitable for its intended use. Manufacturers should be aware that foods with a high oil content may compromise the integrity of the packaging.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.902	g/cm³	0.902	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	7.5	g/10 min	7.5	g/10 min	ASTM D1238
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Seal Initiation Temperature					Dow Method [1]
1.0 mil (25 µm)	181	°F	82.8	°C	
Adhesion to OPP					Dow Method [2]
600°F (316°C)	0.73	pli	0.13	kN/m	
550°F (288°C)	1.0	pli	0.18	kN/m	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	171	°F	77.2	°C	ASTM D1525
Melting Temperature (DSC)	208	°F	97.8	°C	Dow Method

Extrusion	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Melt Temperature	550 to 600	°F	288 to 316	°C	
Minimum Coating Thickness	< 0.30	mil	< 7.6	µm	Dow Method
Minimum Coating Weight	< 4.5	lb/ream	< 7.3	g/m²	Dow Method
Neck-in (600°F (316°C), 1.0 mil (25.4 µm))	5.3	in	134.6	mm	Dow Method

Extrusion Notes

Fabrication Conditions For Extrusion Coating Film:

- Extruder: Black Clawson
- Screw Size: 3.5 in. (90 mm); 30:1 L/D
- Die Gap: 20 mil (0.508 mm)
- Chill Roll Temperature: 57°F (14°C)
- Melt Temperature: 600°F (315°C)
- Output: 250 lb/hr
- Air Gap: 6 in. (150 mm)

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] 1.0 mil (25µm) coating onto 50 lb Kraft paper.
Temperature at which 1 lb/in. (4.4 N/25.4 mm) heat seal strength is achieved.
Heat Seal Strengths, Topware HT Tester, 0.5 S dwell, 40 psi bar pressure, pull speed 150 mm/sec.

[2] 1.0 mil (25µm) coating onto 50 lb Kraft paper.

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