

Technical Information



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 acid copolymer 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 ¹			Dow Method
1.0 mil (25 µm)	181 °F	82.8 °C	
Adhesion to OPP ²			Dow Method
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.

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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PETROMALL INDUSTRY & TRADING CO

Additional Information

North America

U.S. & Canada:

1-800-441-4369

1-989-832-1426

Mexico:

+1-800-441-4369

Latin America

Argentina:

+54-11-4319-0100

Brazil:

+55-11-5188-9000

Colombia:

+57-1-219-6000

Mexico:

+52-55-5201-4700

Europe/Middle East

+800-3694-6367

+31-11567-2626

Italy:

+800-783-825

South Africa

+800-99-5078

Asia Pacific

+800-7776-7776

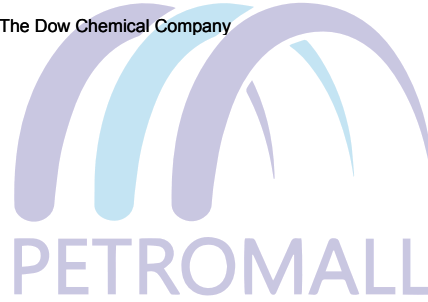
+603-7965-5392

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petromall.net



info@petromall.ps



+970 599 2020 64



Hebron - Palestine

فلسطين - الخليل

+972 2 2233840

