

ATTANE™ 4607G Ultra Low Density Polyethylene Resin

Overview

ATTANE™ 4607G Ultra Low Density Polyethylene Copolymer as a skin layer in cast film offers excellent low temperature hot tack properties combined with outstanding tear and impact strength. In stretch film applications, ATTANE™ 4607G Ultra Low Density Polyethylene Copolymer exhibits excellent stretchability as well as good physical and cling properties. ATTANE™ 4607G Ultra Low Density Polyethylene Copolymer can also be utilised in blown film coextrusion where it is combined with other resins having excellent bubble stability allowing ATTANE™ 4607G Ultra Low Density Polyethylene Copolymer to be used as a sealant in multilayer film structures.

Applications:

- Cling layer in cast stretch film
- Sealants in cast and blown films

Complies with:

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

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.904 g/cm ³	0.904 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ISO 1133
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	0.91 mil	23 µm	
Film Puncture Energy (0.91 mil (23 µm))	44.3 in·lb	5.00 J	Dow Method
Film Puncture Force (0.91 mil (23 µm))	10.8 lbf	48.0 N	Dow Method
Tensile Stress			ISO 527-3
MD: Yield, 0.91 mil (23 µm)	624 psi	4.30 MPa	
TD: Yield, 0.91 mil (23 µm)	522 psi	3.60 MPa	
MD: Break, 0.91 mil (23 µm)	4790 psi	33.0 MPa	
TD: Break, 0.91 mil (23 µm)	3340 psi	23.0 MPa	
Tensile Elongation			ISO 527-3
MD: Break, 0.91 mil (23 µm)	500 %	500 %	
TD: Break, 0.91 mil (23 µm)	630 %	630 %	
Dart Drop Impact (0.91 mil (23 µm))	180 g	180 g	ISO 7765-1/A
Elmendorf Tear Strength			ASTM D1922
MD: 0.91 mil (23 µm)	190 g	190 g	
TD: 0.91 mil (23 µm)	390 g	390 g	
Unstretched Cling	130 g	130 g	ASTM D4649
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	162 °F	72.0 °C	ISO 306/A
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 0.906 mil (23.0 µm))	92	92	ASTM D2457
Haze (0.906 mil (23.0 µm))	0.70 %	0.70 %	ASTM D1003

Additional Information

Film properties measured on monolayer film produced on a Lab Collin line 15 m/min chill roll 25°C.

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	374 to 500 °F	190 to 260 °C

Extrusion Notes

Fabrication Conditions For Cast Film Extrusion:

- Melt Temperature: 190 - 260 °C
- Recommended Gauge Range: 10 - 60 µm
- Haul-Off Speed: 150 - 300 m/min
- Chill Roll Temperature: 20 - 60 °C

Notes

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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