



# ATTANE™ 4607GC

## Ultra Low Density Polyethylene Resin

### Overview

ATTANE™ 4607GC Ultra Low Density Ethylene/Hexene Copolymer is 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™ 4607GC Ultra Low Density Ethylene/Hexene Copolymer exhibits excellent stretchability as well as good physical and cling properties. ATTANE™ 4607GC Ultra Low Density Ethylene/Hexene Copolymer can also be utilised in blown film coextrusion where it is combined with other resins having excellent bubble stability allowing ATTANE™ 4607GC Ultra Low Density Ethylene/Hexene 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 <sup>3</sup>	0.904 g/cm <sup>3</sup>	ASTM D792
Base Density <sup>1</sup>	0.904 g/cm <sup>3</sup>	0.904 g/cm <sup>3</sup>	Dow Method
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	1 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	ASTM D1525
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))	0.700 %	0.700 %	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



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## Extrusion Notes

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Fabrication Conditions for Cast Film:

- Melt Temperature: 190-260°C
- Chill Roll (primary/secondary) Temperature: 20-60°C
- Haul-Off Speed: 150-300 m/min
- Recommended Gauge Range: 10-60  $\mu\text{m}$

## 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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<sup>1</sup> Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm<sup>3</sup>. Base density is the estimated density of the polymer if it did not contain any antiblock.

