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/cm³	0.904	g/cm³	ASTM D792
Base Density [1]	0.904	g/cm³	0.904	g/cm³	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

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 µm

Notes

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

[1] 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/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

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