



Pinnacle PP 1703

Pinnacle Polymers - Polypropylene Homopolymer

Tuesday, November 5, 2019

General Information

Product Description

3.5 MELT FLOW HOMOPOLYMER FOR STRETCHED TAPE APPLICATIONS

Pinnacle Polymers Polypropylene 1703 is made via UNIPOL™ PP technology, which utilizes gas-phase fluidized bed reactors with a high activity catalyst system to ensure uniform physical properties and lot-to-lot consistency.

This product is intended for woven products used for carpet backing, sacking, industrial and geotextile fabrics.

The 1703 product provides:

- Excellent color and processing stability
- Resistance to gas fading
- Low water carry-over
- Excellent lot-to-lot consistency

Pinnacle's polypropylene, as marketed by Pinnacle Polymers, in natural, uncolored pellet form complies with appropriate requirements of CFR Title 21, Part 177, Subpart B, Section 177.1520 (c) 1.1a entitled "Olefin Polymers" of the Food Additives Amendment of 1958 to the United States Food, Drug and Cosmetic Act of 1938.

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Features	• Food Contact Acceptable • Gas-fading Resistant	• Good Color Stability • Good Processing Stability	• Homopolymer • Low Water Carryover
Uses	• Carpet Backing • Industrial Applications	• Tape • Textile Applications	
Agency Ratings	• FDA 21 CFR 177.1520(c) 1.1a		
Forms	• Pellets		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (230°C/2.16 kg)	3.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.015	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, 0.126 in, Injection Molded)	5200	psi	ASTM D638
Tensile Elongation ² (Yield, 0.126 in, Injection Molded)	10	%	ASTM D638
Flexural Modulus - 1% Secant ³ (0.126 in, Injection Molded)	240000	psi	ASTM D790A
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact ⁴ (73°F, 0.126 in, Injection Molded)	0.70	ft-lb/in	ASTM D256
Notched Izod Impact (Area) ⁴ 73°F, 0.126 in, Injection Molded	1.76	ft-lb/in ²	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	237	°F	ASTM D648

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Notes

¹ Typical properties: these are not to be construed as specifications.

² Type I, 2.0 in/min

³ Type I, 0.050 in/min

⁴ Type I