



Pinnacle PP 1517

Pinnacle Polymers - Polypropylene Homopolymer

Tuesday, November 5, 2019

General Information

Product Description

20 MELT FLOW HOMOPOLYMER FOR FIBER SPINNING

Pinnacle Polymers Polypropylene 1517 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 fiber spinning and other critical extrusion applications.

The 1517 product provides:

- Excellent color and processing stability
- Superior fiber spinning characteristics
- Resistance to gas fading
- Enhanced fiber resiliency
- Excellent lot-to-lot consistency

Pinnacle's 1517 polypropylene as marketed by Pinnacle Polymers Company, in natural, uncolored pellet form complies with appropriate requirements of CFR Title 21, Part 177, Subpart B, Section 177.1520 (c) 1.1a. May be used in contact with food types I, II, IV-B, VII-B and VIII described in Table 1 of section 176.170(c), under conditions of use B through H described in table 2 of section 176.170(c) and with food types III, IV-A, V, VI, VII-A, and IX described in Table 1 of section 176.170(c) under conditions of use D through H described in table 2 of section 176.170(c).

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Features	• Food Contact Acceptable • Gas-fading Resistant	• Good Color Stability • Good Processing Stability	• Homopolymer • Resilient
Uses	• Fibers		
Agency Ratings	• FDA 21 CFR 176.170(c), Table 2, Cond. B • FDA 21 CFR 176.170(c), Table 2, Cond. C • FDA 21 CFR 176.170(c), Table 2, Cond. D	• FDA 21 CFR 176.170(c), Table 2, Cond. E • FDA 21 CFR 176.170(c), Table 2, Cond. F • FDA 21 CFR 176.170(c), Table 2, Cond. G	• FDA 21 CFR 176.170(c), Table 2, Cond. H • FDA 21 CFR 177.1520(c) 1.1a
Forms	• Pellets		
Processing Method	• Extrusion	• Fiber (Spinning) Extrusion	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (230°C/2.16 kg)	20	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.014	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, 0.126 in, Injection Molded)	5000	psi	ASTM D638
Tensile Elongation ² (Yield, 0.126 in, Injection Molded)	9.0	%	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)	0.51	ft-lb/in	ASTM D256

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Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (Area) ⁴ 73°F, 0.126 in, Injection Molded	1.24	ft·lb/in ²	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	244	°F	ASTM D648

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