Pinnacle PP 4150H

Pinnacle Polymers - Polypropylene Impact Copolymer

General Information

Product Description

55 MELT FLOW HIGH IMPACT COPOLYMER FOR INJECTION MOLDING

Pinnacle Polymers Polypropylene 4150H 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 thin-wall injection molding of housewares, industrial applications and consumer products requiring superior impact properties. Its high melt flow allows for quick filling of molds. Contains nucleator and antistat.

It is characterized not only by its easy mold flow, but also high impact at both room and sub-ambient conditions.

The 4150H product provides:

- Ultra high impact
- Superior balance of stiffness and impact strength
- Very high melt flow
- Fast cycle-time

Pinnacle's 4150H polypropylene is covered under US FDA Food Contact Notification 864. As such, this polymer can be used in contact with all food types under Conditions of Use A-H, as described in 21 CFR 176.170, Tables 1 and 2. This polymer also complies with 21 CFR 177.1520(c), items 3.1(a) and 3.2(a).

General			
Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Additive	• Antistatic	• Nucleating Agent	
Features	• Antistatic • Fast Molding Cycle • Food Contact Acceptable	• High Flow • Impact Copolymer • Low Temperature Impact Resistance	• Nucleated • Ultra High Impact Resistance
Uses	• Consumer Applications • Household Goods	• Industrial Applications • Thin-walled Parts	
Agency Ratings	• FDA 21 CFR 176.170 Table 1 & 2, Cond A-H	• FDA 21 CFR 177.1520(c) 3.1a	• FDA 21 CFR 177.1520(c) 3.2a
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm³	ASTM D1505
Melt Mass-Flow Rate (230°C/2.16 kg)	55	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)	3050	psi	ASTM D638
Tensile Elongation [2] (Yield, 0.126 in, Injection Molded)	6.0	%	ASTM D638
Flexural Modulus - 1% Secant [3] (0.126 in, Injection Molded)	145000	psi	ASTM D790A

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Impact	Nominal Value	Unit	Test Method
Notched Izod Impact [4] (73°F, 0.126 in, Injection Molded)	> 10	ft·lb/in	ASTM D256
Notched Izod Impact (Area) [4]			ASTM D256
73°F, 0.126 in, Injection Molded	24.7	ft·lb/in²	
Gardner Impact [5] (-22°F)	266	in·lb	ASTM D5420

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	205	°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

[5] Method G, Geometry GC