4150H

55 MELT FLOW HIGH IMPACT COPOLYMER FOR INJECTION MOLDING

Product Description and Applications:

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.

Features:

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 as marketed by Pinnacle Polymers Company, in natural, uncolored pellet form is covered under US FDA Food Contact Notification 864. As such, this polymer complies with the requirements of CFR Title 21 and can be used in contact with all food types under Conditions of Use A-H.

Typical Properties

Property	Traditional Units	SI Units	ASTM Test
Melt Flow Rate	55 g/10 min.	55 g/10 min.	D1238[1]
Density at 23°C	0.9 g/cm^3	900 kg/m^3	D1505
Shrinkage	0.014 in/in	0.014 mm/mm	D955
Heat Deflection Temperature at 0.455 MPa (66psi)	205°F	96°C	D648
Tensile yield strength, at 51 mm/min	3000 psi	21 MPa	D638[2]
Flexural modulus (1% secant) at 1.27 mm/min	145,000 psi	1000 MPa	D790A[2]
Yield Elongation	6%	6%	D638[2]
Notched Izod breaks, at 73°F/23°C	100% No-breaks	100% No-breaks	D256[2]
Notched Izod impact strength, at 73°F/23°C	≥10 ft-lb/in	≥534 J/m 52 kJ/m²	D256[2]
Gardner Impact strength at -22°F/-30°C	275 in-lb	30 J	D5420[3]

[1] Condition L 230/2.16
[2] ASTM Type I specimen, 3.2 mm thick (injection molded per ASTM D4101-92a)
[3] Method G, Geometry GC
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FDA and SDS documents are available on our website at: http://www.pinnaclepolymers.com/datasds.php