

Pinnacle PP 1403N

Pinnacle Polymers - Polypropylene Homopolymer

Tuesday, November 5, 2019

General Information

Product Description

3.5 MELT FLOW CLARIFIED HOMOPOLYMER FOR THERMOFORMING APPLICATIONS

Pinnacle Polymers Polypropylene 1403N 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 extruded sheet and thermoforming applications. The combination of flow characteristics and high stiffness provide light-weighting potential for containers. 1403N contains a clarifier providing excellent see-through clarity.

The 1403N product provides:

- · Superior color and processing stability
- · Good melt strength and stretchability
- · High clarity
- · Low level of extractables

Pinnacle's 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 entitled "Olefin Polymers" of the Food Additives Amendment of 1958 to the United States Food, Drug and Cosmetic Act of 1938.

| General | | | | |
|-------------------|---|---|--|--|
| Material Status | Experimental: Active | | | |
| Availability | • Europe | North America | | |
| Additive | Clarifier | | | |
| | Food Contact Acceptable | Good Processing Stability | High Stiffness | |
| Features | Good Color Stability | Good Stretchability | Homopolymer | |
| | Good Melt Strength | High Clarity | Low Extractables | |
| Uses | Containers | • Sheet | Thermoforming Applications | |
| Agency Ratings | • FDA 21 CFR 177.1520(c) 1.1a | | | |
| Forms | • Pellets | | | |
| Processing Method | Sheet Extrusion | Thermoforming | | |

| 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) | 3.5 | g/10 min | ASTM D1238 | |
| Molding Shrinkage - Flow | 0.017 | in/in | ASTM D955 | |
| Mechanical | Nominal Value | Unit | Test Method | |
| Tensile Strength ² (Yield, 0.126 in, Injection Molded) | 5600 | psi | ASTM D638 | |
| Tensile Elongation ² (Yield, 0.126 in, Injection Molded) | 12 | % | ASTM D638 | |
| Flexural Modulus - 1% Secant ³ (0.126 in, Injection Molded) | 275000 | psi | ASTM D790A | |
| Impact | Nominal Value | Unit | Test Method | |
| Notched Izod Impact ⁴ (73°F, 0.126 in, Injection Molded) | 0.90 | ft·lb/in | ASTM D256 | |
| Thermal | Nominal Value | Unit | Test Method | |
| Deflection Temperature Under Load (66 psi, Unannealed) | 253 | °F | ASTM D648 | |
| Optical | Nominal Value | Unit | | |
| Haze (50.0 mil) | 25.0 | % | | |
| | | | | |



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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