



Pinnacle PP 1403C3

Pinnacle Polymers - Polypropylene Homopolymer

Tuesday, November 5, 2019

General Information

Product Description

3 MELT FLOW CLARIFIED HOMOPOLYMER FOR THERMOFORMING APPLICATIONS

Pinnacle Polymers Polypropylene 1403C3 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 requiring good see-through clarity. Contains new technology clarifier for superior clarity.

The 1403C3 product provides:

- Superior clarity
- Good melt strength and stretchability
- Superior color and processing stability
- Excellent cleanliness

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 | • Commercial: Active |
| Availability | • Europe • North America |
| Additive | • Clarifier |
| Features | • Clean/High Purity • Good Melt Strength • High Clarity • Food Contact Acceptable • Good Processing Stability • Homopolymer • Good Color Stability • Good Stretchability |
| Uses | • 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/cm ³ | ASTM D1505 |
| Melt Mass-Flow Rate (230°C/2.16 kg) | 3.0 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow | 0.019 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength ² (Yield, 0.126 in, Injection Molded) | 5950 | psi | ASTM D638 |
| Tensile Elongation ² (Yield, 0.126 in, Injection Molded) | 8.0 | % | ASTM D638 |
| Flexural Modulus - 1% Secant ³ (0.126 in, Injection Molded) | 310000 | psi | ASTM D790A |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact ⁴ (73°F, 0.126 in, Injection Molded) | 0.45 | ft-lb/in | ASTM D256 |
| Notched Izod Impact (Area) ⁴ 73°F, 0.126 in, Injection Molded | 1.14 | ft-lb/in ² | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 234 | °F | ASTM D648 |

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| Optical | Nominal Value | Unit |
|-----------------|---------------|------|
| Haze (50.0 mil) | 9.00 | % |

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