



# Pinnacle PP 5112C3

## Pinnacle Polymers - Polypropylene Random Copolymer

Tuesday, November 5, 2019

### General Information

#### Product Description

12 MELT FLOW CLARIFIED RANDOM COPOLYMER FOR INJECTION MOLDING

Pinnacle Polymers Polypropylene 5112C3 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 injection molding applications that require low melt flow, fast cycle time, enhanced processability and excellent clarity. This product also has improved impact resistance and a new generation clarifier.

The 5112C3 product provides:

- Improved FDA food contact status
- New generation clarifier
- Improved color
- Excellent impact resistance

Pinnacle 5112C3 as marketed by Pinnacle Polymers Company, in natural, uncolored pellet form is cleared by way of FCN 1538 for use in single- and repeated-use articles intended to contact all types of food under the Food and Drug Administration's (FDA) Conditions of Use A through H. FDA has not evaluated the use of this product in contact with infant formula or breast milk.

#### General

|                   |                           |                 |                    |
|-------------------|---------------------------|-----------------|--------------------|
| Material Status   | • Commercial: Active      |                 |                    |
| Availability      | • Europe                  | • North America |                    |
| Additive          | • Clarifier               |                 |                    |
| Features          | • Fast Molding Cycle      | • High Clarity  | • Random Copolymer |
| Agency Ratings    | • Food Contact Acceptable |                 |                    |
| Forms             | • Pellets                 |                 |                    |
| Processing Method | • Injection Molding       |                 |                    |

### ASTM & ISO Properties <sup>1</sup>

| Physical   | Nominal Value | Unit                  | Test Method |
|--|---------------|-----------------------|-------------|
| Density  | 0.900         | g/cm <sup>3</sup>     | ASTM D1505  |
| Melt Mass-Flow Rate (230°C/2.16 kg)                                    | 12            | g/10 min              | ASTM D1238  |
| Molding Shrinkage - Flow   | 0.016         | in/in                 | ASTM D955   |
| Mechanical   | Nominal Value | Unit                  | Test Method |
| Tensile Strength <sup>2</sup> (Yield, 0.126 in, Injection Molded)      | 4100          | psi                   | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Yield, 0.126 in, Injection Molded)    | 11            | %                     | ASTM D638   |
| Flexural Modulus - 1% Secant <sup>3</sup> (0.126 in, Injection Molded) | 155000        | psi                   | ASTM D790A  |
| Impact   | Nominal Value | Unit                  | Test Method |
| Notched Izod Impact <sup>4</sup> (73°F, 0.126 in, Injection Molded)    | 2.8           | ft·lb/in              | ASTM D256   |
| Notched Izod Impact (Area) <sup>4</sup>                                |               |                       | ASTM D256   |
| 73°F, 0.126 in, Injection Molded                                       | 7.14          | ft·lb/in <sup>2</sup> |             |
| Thermal  | Nominal Value | Unit                  | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)                 | 165           | °F                    | ASTM D648   |

# Pinnacle PP 5112C3

## Pinnacle Polymers - Polypropylene Random Copolymer

| Optical          | Nominal Value | Unit |
|------------------|---------------|------|
| Haze (50.0 mil)  | 9.00          | %    |
| Yellowness Index | < -5.0        | YI   |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Type I, 2.0 in/min

<sup>3</sup> Type I, 0.050 in/min

<sup>4</sup> Type I