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## 5112C3

### 12 MELT FLOW CLARIFIED RANDOM COPOLYMER FOR INJECTION MOLDING

#### Product Description and Applications:

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.

#### Features:

The 5112C3 product provides:

- New generation clarifier
- Improved color
- Excellent impact resistance
- Low melt flow, excellent processability

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) 3.1a entitled "Olefin Polymers" of the Food Additives Amendment of 1958 to the United States Food, Drug and Cosmetic Act of 1938.

### Typical Properties

| Property   | Traditional Units     | SI Units                        | ASTM Test          |
|--|-----------------------|---------------------------------|--------------------|
| Melt Flow Rate                                   | 12 g/10 min.          | 12 g/10 min.                    | D1238 <sup>1</sup> |
| Density at 23°C                                  | 0.9 g/cm <sup>3</sup> | 900 kg/m <sup>3</sup>           | D1505              |
| Shrinkage  | 0.016 in/in           | 0.016 mm/mm                     | D955               |
| Heat Deflection Temperature at 0.455 MPa (66psi) | 165°F                 | 74°C                            | D648               |
| Tensile yield strength, at 51 mm/min             | 4100 psi              | 28.3 MPa                        | D638 <sup>2</sup>  |
| Yield elongation, at 51 mm/min                   | 11%                   | 11%                             | D638 <sup>2</sup>  |
| Flexural modulus (1% secant) at 1.27 mm/min      | 145,000 psi           | 1000 MPa                        | D790A <sup>2</sup> |
| Notched Izod impact strength, at 73°F/23°C       | 2.8 ft-lb/in          | 149 J/m<br>15 kJ/m <sup>2</sup> | D256 <sup>2</sup>  |
| % Yellowness Index                               | Less than -5          | Less than -5                    |                    |
| Haze (1.27 mm plaque)                            | 9%                    | 9%                              |                    |

<sup>1</sup>Condition L 230/2.16

<sup>2</sup>ASTM Type I specimen, 3.2 mm thick (injection molded per ASTM D4101-92a)

<sup>3</sup>Method G, Geometry GC

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