



## Pinnacle PP 8238H

### Pinnacle Polymers - Polypropylene Impact Copolymer

Tuesday, November 5, 2019

#### General Information

##### Product Description

38 MELT FLOW HIGH FLEX IMPACT COPOLYMER FOR INJECTION MOLDING

Pinnacle Polymers Polypropylene 8238H 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 applications. Its high melt flow allows for quick filling of molds. Also designed for use in compounding.

The 8238H product provides:

- High Flexural Modulus
- Superior balance of stiffness and impact strength
- Long Term Heat Stability
- Nucleated
- Fast cycle-time

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.

#### General

|                   |                               |                     |                    |
|-------------------|-------------------------------|---------------------|--------------------|
| Material Status   | • Commercial: Active          |                     |                    |
| Availability      | • Europe                      | • North America     |                    |
| Additive          | • Heat Stabilizer             | • Nucleating Agent  |                    |
| Features          | • Fast Molding Cycle          | • Heat Stabilized   | • Impact Copolymer |
|                   | • Food Contact Acceptable     | • High Flow         | • Nucleated        |
| Uses              | • Compounding                 | • Thin-walled Parts |                    |
| Agency Ratings    | • FDA 21 CFR 177.1520(c) 3.1a |                     |                    |
| 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)   | 38            | g/10 min              | ASTM D1238  |
| Molding Shrinkage - Flow  | 0.014         | in/in                 | ASTM D955   |
| Mechanical  | Nominal Value | Unit                  | Test Method |
| Tensile Strength <sup>2</sup> (Yield, 0.126 in, Injection Molded)           | 4200          | psi                   | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Yield, 0.126 in, Injection Molded)         | 6.0           | %                     | ASTM D638   |
| Flexural Modulus - 1% Secant <sup>3</sup> (0.126 in, Injection Molded)      | 213000        | psi                   | ASTM D790A  |
| Impact  | Nominal Value | Unit                  | Test Method |
| Notched Izod Impact <sup>4</sup> (73°F, 0.126 in, Injection Molded)         | 1.3           | ft-lb/in              | ASTM D256   |
| Notched Izod Impact (Area) <sup>4</sup><br>73°F, 0.126 in, Injection Molded | 3.24          | ft-lb/in <sup>2</sup> | ASTM D256   |
| Gardner Impact <sup>5</sup> (-22°F)   | 35.4          | in-lb                 | ASTM D5420  |

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| Thermal  | Nominal Value | Unit | Test Method |
|--|---------------|------|-------------|
| Deflection Temperature Under Load (66 psi, Unannealed) | 243           | °F   | ASTM D648   |

### 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

<sup>5</sup> Method G, Geometry GC