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4220H

20 MELT FLOW HIGH IMPACT COPOLYMER FOR INJECTION MOLDING

Product Description and Applications:

Pinnacle Polymers Polypropylene 4220H 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 of flooring, automotive, appliance, lawn and garden products, and industrial applications. Provides an excellent base stock for compounding of filled and reinforced grades.

Features:

The 4220H product provides:

- High impact and melt flow
- Superior balance of stiffness and impact strength
- Excellent color and processing stability
- UL listed

It is characterized by its easy mold flow and high impact at both room and sub-ambient conditions.

Pinnacle's 4220H polypropylene is covered under US FDA Food Contact Notification 864. As such, this polymer can be used in contact with all food types under Conditions of Use A-H, as described in 21 CFR 176.170, Tables 1 and 2. This polymer also complies with 21 CFR 177.1520(c), items 3.1(a) and 3.2(a).

Typical Properties

| Property | Traditional Units | SI Units | ASTM Test |
|---|-----------------------|-----------------------|--------------------|
| Melt Flow Rate | 20 g/10 min. | 20 g/10 min. | D1238 ¹ |
| Density at 23°C | 0.9 g/cm ³ | 900 kg/m ³ | D1505 |
| Tensile yield strength, at 51 mm/min | 3500 psi | 24.2 MPa | D638 ² |
| Flexural modulus (1% secant) at 1.27 mm/min | 175,000 psi | 1208 MPa | D790A ² |
| Yield Elongation | 6% | 6% | D638 ² |
| Notched Izod breaks, at 73°F/23°C | 100% No-breaks | 100% No-breaks | D256 ² |
| Notched Izod impact strength, at 73°F/23°C | ≥10 ft-lb/in | ≥534 J/m | |
| Gardner Impact strength at -22°F/-30°C | 225 in-lb | 24.8 J | D5420 ³ |

¹Condition L 230/2.16

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

³Method G, Geometry GC

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