



HD1600JP

High Density Polyethylene Resin

Special Characteristics: InnoPlus HD1600JP is good flowability high density polyethylene which can be processed in either injection or compression molding. This grade has excellent organoleptic properties which prevent unpleasant odor and taste from cap or closure to transfer to water

Typical Applications: Beverage caps for drinking or mineral water and non-carbonated soft drink product **Typical Properties:**

| Properties | HD1600JP | Unit | Test Method |
|--|----------|--------------------|-------------|
| Physical Properties | | | |
| Melt Flow Rate (190 °C, 2.16 kg) | 12 | g/10 min | ASTM D1238 |
| Density | 0.958 | g/cm ³ | ASTM D1505 |
| Vicat softening point | 120 | °C | ASTM D1525 |
| Melting Temperature | 132 | °C | ASTM D3418 |
| | | | |
| Mechanical Properties (compression specimens) | | | |
| | | | |
| Tensile Strength at Yield | 290 | kg/cm ² | ASTM D638 |
| Tensile Strength at Break | 200 | kg/cm ² | ASTM D638 |
| Elongation at Break | 230 | % | ASTM D638 |
| Stiffness | 9,100 | kg/cm ² | ASTM D747 |
| Flexural Modulus | 12,500 | kg/cm ² | ASTM D790 |
| Notched Izod Impact Strength | 3 (C)* | kg.cm/cm | ASTM D256 |
| Durometer Hardness | 64 | Shore D | ASTM D2240 |
| ESCR, F ₅₀ (Condition B, 10 % Igepal) | 3 | hrs | ASTM D1693 |

* C = Complete Break

Recommendation:

Injection molding process— Extrusion temperature : 160 -220 °C, Compression molding process— Extrusion temperature 150 - 220 °C

FDA Statement:

Food and Drug Administration US FDA 21 CFR 177.1520 and Commission Regulation (EU) 10/2011. More compliance regulations and standards that related to the product shall be exhibited in Product Regulatory Certificate (PRC) document.

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Note: Properties reported here are typical values of the product, not to be considered as specifications.

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