

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