



# HD3500C

High Density Polyethylene Resin

Special Characteristics : InnoPlus HD3500C are bimodal high density polyethylene with excellent environmental stress cracking resistance (ESCR), high CO2 retention and easy processing. With distinguishing stress cracking resistance, this grade is suitable for beverage caps and closures for new caps design.

Additive InnoPlus HD3500C : slip agent grade

Typical Applications : Beverage caps for carbonated soft drink.

Typical Properties :

Properties	HD3500C	Unit	Test Method
Physical Properties			
Melt Flow Rate (190 °C, 2.16 kg)	1.0	g/10 min	ASTM D1238
Density	0.956	g/cm <sup>3</sup>	ASTM D1505
Vicat softening point	120	°C	ASTM D1525
Melting Temperature	130	°C	ASTM D3418

Mechanical Properties			
Tensile Strength at Yield	240	kg/cm <sup>2</sup>	ASTM D638
Tensile Strength at Break	270	kg/cm <sup>2</sup>	ASTM D638
Elongation at Break	>1,000	%	ASTM D638
Stiffness	8,100	kg/cm <sup>2</sup>	ASTM D747
Flexural Modulus	11,500	kg/cm <sup>2</sup>	ASTM D790
Notched Izod Impact Strength	6 (NB) *	kg.cm/cm	ASTM D256
Durometer Hardness	62	Shore D	ASTM D2240
ESCR, F <sub>50</sub> (Condition B, 10 % Igepal)	460	hrs	ASTM D1693

### \* NB = Non Break

#### Recommendation :

Injection Molding Process— Extrusion temperature : 170 - 190 °C Compression Molding process— Extrusion Temperature 160 - 230 °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. GC makes no representations as to the accuracy or completeness of the information contained herein.

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