

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 ³	ASTM D1505
Vicat softening point	120	°C	ASTM D1525
Melting Temperature	130	°C	ASTM D3418
Mechanical Properties			
Tensile Strength at Yield	240	kg/cm ²	ASTM D638
Tensile Strength at Break	270	kg/cm ²	ASTM D638
Elongation at Break	>1,000	%	ASTM D638
Stiffness	8,100	kg/cm ²	ASTM D747
Flexural Modulus	11,500	kg/cm ²	ASTM D790
Notched Izod Impact Strength	6 (NB) *	kg.cm/cm	ASTM D256
Durometer Hardness	62	Shore D	ASTM D2240
ESCR, F ₅₀ (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.