

HD6001C

High Density Polyethylene Resin

Product Description :

InnoPlus HD6001C is bimodal high density polyethylene with outstanding environmental stress cracking resistance (ESCR) with excellent organoleptic properties. This grade is suitable for carbonated beverages and sparkling water caps and closures for both common and new designs. They show good processability in compression molding machine.

Additive : non slip agent grade

Typical Application : Caps and closures for carbonated soft drink and sparkling beverage.

Typical Properties :

Properties	Typical Value	Unit	Test Method
	HD6001C		
<i><u>Physical Properties</u></i>			
Melt Flow Rate (190°C, 2.16 kg)	0.4	g/10 min	ASTM D1238
Density	0.957	g/cm ³	ASTM D1505
Vicat Softening Point @ 10 N, 50 °C/hr	125	°C	ASTM D1525
Melting Point	132	°C	ASTM D3418
<i><u>Mechanical Properties</u></i>			
Tensile Strength @ Yield	320	kg/cm ²	ASTM D638
Tensile Strength @ Break	390	kg/cm ²	ASTM D638
Elongation @ Break	1000	%	ASTM D638
Stiffness	11000	kg/cm ²	ASTM D747
Flexural Modulus	14000	kg/cm ²	ASTM D790
Notched Izod Impact Strength	10 (P) *	kg.cm/cm	ASTM D256
Durometer Hardness	66	Shore D	ASTM D2240
ESCR, F ₅₀ (Condition B, 10 % Igepal)	210	hrs	ASTM D1693

* P = Partial Break

Recommendation :

Compression Molding process— Extrusion Temperature 160 - 190 °C

Injection Molding Process— Extrusion Temperature 180 - 215 °C

FDA Statement :

HDPE under the brand InnoPlus complies with U.S. FDA 21 CFR 177.1520 regulation for polyethylene used in articles that contact food except for articles used for packaging or holding food during cooking.