

HD7000H

High Density Polyethylene Resin

Special Characteristics : InnoPlus HD7000H is high density polyethylene which has outstanding mechanical strength, good weathering resistance and excellent product appearance. It is suitable to produce not only truck-bed liner from sheet extrusion and thermoforming process but also automotive fuel tanks from blow molding process.

Typical Applications : Truck-bed liner, Automotive reservoir tanks.

Typical Properties :

Properties	HD7000H	Unit	Test Method
Physical Properties			
Melt Flow Rate (190 °C, 2.16 kg)	0.1	g/10 min	ASTM D1238
Melt Flow Rate (190 °C, 21.6 kg)	10	g/10 min	ASTM D1238
Density	0.952	g/cm ³	ASTM D1505
Vicat softening point	126	°C	ASTM D1525
Melting Temperature	130	°C	ASTM D3418
Mechanical Properties (Based on compression specimens)			
Tensile Strength at Yield	280	kg/cm ²	ASTM D638
Tensile Strength at Break	400	kg/cm ²	ASTM D638
Elongation at Break	900	%	ASTM D638
Flexural Modulus	11,000	kg/cm ²	ASTM D790
Notched Izod Impact Strength	42 (NB)*	kg.cm/cm	ASTM D256
Durometer Hardness	63	Shore D	ASTM D2240
ESCR, F ₅₀ (Condition B, 25 % Igepal)	>1,000	hrs	ASTM D1693

* NB = Non Break

Recommendation:

Temperature profile

Thermoforming process: 210 - 230 °C

Blow molding process : 190 - 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.