

HD8100M / HD8100MB

High Density Polyethylene Resin

Product Description

InnoPlus HD8100M is a natural color-high density polyethylene pipe grade.

InnoPlus HD8100MB is a black compounded-high density polyethylene pipe grade which is certified as PE100.

Both are bimodal resins exhibit excellent creep resistance and chemical resistance properties. They are suitable for high quality pressure pipes, produced by conventional pipe extrusion process.

Typical Application : High pressure and High temperature pipes; Drinking water pipes, Industrial pipes and Sewer pipes.

Typical Properties :

Properties	Typical Value		Unit	Test Method
	HD8100M	HD8100MB		
<i>Physical Properties</i>				
Melt Flow Rate (190 °C, 5 kg)	0.25	0.25	g/10 min	ISO 1133
Density	0.952	0.962	g/cm ³	ISO 1183
Vicat Softening Point @ 10 N, 50 °C/hr	124	124	°C	ASTM D1525
Melting Point	128	128	°C	ASTM D3418
<i>Mechanical Properties</i>				
Tensile Strength @ Yield	25	24	MPa	ISO 527
Tensile strength @ Break	33	36	MPa	ISO 527
Elongation @ Break	750	780	%	ISO 527
Stiffness	7500	8000	kg/cm ²	ASTM D747
Flexural Modulus	11000	11500	kg/cm ²	ASTM D790
Notched Izod Impact Strength	48 (NB)*	50 (NB)*	kg.cm/cm	ASTM D256
Durometer Hardness	64	64	Shore D	ASTM D2240
ESCR , F ₅₀ (Condition B, 25 % Igepal)	>1000	>2000	hrs	ASTM D1693
<i>Other Properties</i>				
Carbon Black Content	-	>2.0	%	ISO 6964
Oxidative Induction Time (OIT, 200 °C)	-	>50	Minutes	ISO 11357-6
Classification	-	PE100	-	ISO 12162

* NB = Non Break

Recommendation :

Preheat condition : 2 hours at 80 °C (For HD8100MB)

Extruder temperature : 180 - 200 °C

Die temperature : 190 - 220 °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.

Note : Properties reported here are typical values of the product, not to be considered as specifications.

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