

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, 2.16 kg)	0.04	0.03	g/10 min	ASTM D1238
Melt Flow Rate (190 °C, 5 kg)	0.22	0.20	g/10 min	ASTM D1238
Density	0.952	0.962	g/cm ³	ASTM D1505
Vicat Softening Point @ 10 N, 50 °C/hr	124	124	°C	ASTM D1525
Melting Point	128	128	°C	ASTM D2117
<i>Mechanical Properties</i>				
Tensile Strength @ Yield	250	240	kg/cm ²	ASTM D638
Tensile strength @ Break	420	370	kg/cm ²	ASTM D638
Elongation @ Break	750	780	%	ASTM D638
Stiffness	7500	8000	kg/cm ²	ASTM D747
Notched Izod Impact Strength	48 (NB)*	50 (NB)*	kg.cm/cm	ASTM D256
Durometer Hardness	64	64	Shore D	ASTM D2240
ESCR (Condition B, 25 % Igepal)	>1000	>2000	hrs, F50	ASTM D1693
<i>Other Properties</i>				
Carbon Black Content	-	2.0	%	ASTM D4218
Oxidative Induction Time (OIT, 200 °C)	-	>50	Minutes	ASTM D3895
Classification	-	PE100	-	ISO12162

* NB = Non Break

Recommendation :

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.

PTT Chemical makes no representations as to the accuracy or completeness of the information contained herein.