

Producer: PTT / Thailand

HD 8100M / HD 8100MB

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.

Applications:

High pressure and high temperature pipes: Drinking water pipes, Industrial pipes and Sewer pipes.

PROPERTIES	TYPICAL VALUE		UNIT	TEST METHOD
	HD8100M	HD8100MB		
Physical Properties				
Melt Flow Rate (190 °C, 2.16 kg)	0.04	0.03	g/10 min	ASTM D 1238
Melt Flow Rate (190 °C, 5 kg)	0.22	0.20	g/10 min	ASTM D 1238
Density	0.952	0.962	g/cm ³	ASTM D1505
Vicat Softening Point @ 10 N, 50 °C/hr	124	124	°C	ASTM D 1525
Melting Point	128	128	°C	ASTM D 2117
Mechanical Properties				
Tensile Strength @ Yield	250	240	kg/cm ²	ASTM D 638
Tensile Strength @ Break	420	370	kg/cm ²	ASTM D 638
Elongation @ Break	750	780	%	ASTM D 638
Stiffness	7500	8000	kg/cm ²	ASTM D 747
Flexural Modulus	11000	11500	kg/cm ²	ASTM D 790
Notched Izod Impact Strength	48 (NB)*	50 (NB)*	kg.cm/cm	ASTM D 256
Durometer Hardness	64	64	Shore D	ASTM D 2240
ESCR (Condition B, 25 % Igepal)	>1000	>2000	hrs, F50	ASTM D 1693
Other Properties				
Carbon Black Content	-	> 2.0	%	ASTM D 4218
Oxidative Induction Time (OIT, 200 °C)	-	> 50	Minutes	ASTM D 3895
Classification	-	PE 100	-	ISO 12162

Recommendation :

Extruder temperature : 180-200 °C

Die temperature : 190-220 °C