

# HD8100M

High Density Polyethylene Resin

**Special Characteristics :** InnoPlus HD8100M is a natural color-high density polyethylene pipe grade which is certified as a MRS 10.0 (PE100). InnoPlus HD8100M is produced from bimodal polymerization, Mitsui technology which provides excellent mechanical strength, high thermal stability and chemical resistance properties. This grade can mix with color masterbatch and apply for color pipe.

**Typical Applications :** Drinking water pipes, Industrial pipes, Sewer pipes and conduit pipe for wire & cable protection.

**Typical Properties :**

Properties	HD8100M	Unit	Test Method
<b>Physical Properties</b>			
Melt Flow Rate (190 °C, 5 kg)	0.25	g/10 min	ISO 1133
Density	0.952	g/cm <sup>3</sup>	ISO 1183
Vicat softening point	124	°C	ASTM D1525
Melting Temperature	133	°C	ASTM D3418
<b>Mechanical Properties (Based on com-pression specimens)</b>			
Tensile Strength at Yield	25	MPa	ISO 527
Tensile Strength at Break	33	MPa	ISO 527
Elongation at Break	750	%	ISO 527
Stiffness	7,500	kg/cm <sup>2</sup>	ASTM D747
Flexural Modulus	10,000	kg/cm <sup>2</sup>	ASTM D790
Notched Izod Impact Strength	48 (NB)*	kg.cm/cm	ASTM D256
Durometer Hardness	64	Shore D	ASTM D2240
ESCR, F <sub>50</sub> (Condition B, 25 % Igepal)	>1000	hrs	ASTM D1693
<b>Other Properties</b>			
Oxidative Induction Time (OIT, 200 °C)	>40	min.	ISO 11357-6
MRS Classification	10.0 (PE100)	MPa	ISO12162/ ISO 9080

\* NB = Non Break

**Recommendation :**

Extrusion temperature : 180 - 200 °C

Die temperature : 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.

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

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