



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	
Physical Properties				
Melt Flow Rate (190 °C, 5 kg)	0.25	g/10 min	ISO 1133	
Density	0.952	g/cm ³	ISO 1183	
Vicat softening point	124	°C	ASTM D1525	
Melting Temperature	133	°C	ASTM D3418	
Mechanical Properties (Based on com-pression specimens)				
Tensile Strength at Yield	33	MPa MPa	ISO 527	
Tensile Strength at Break			ISO 527	
Elongation at Break	750	%	ISO 527	
Stiffness	7,500	kg/cm ²	ASTM D747	
Flexural Modulus	10,000	kg/cm ²	ASTM D790	
Notched Izod Impact Strength	48 (NB)*	kg.cm/cm	ASTM D256	
Durometer Hardness	64	Shore D	ASTM D2240	
ESCR, $\mathrm{F_{50}}$ (Condition B, 25 % Igepal)	>1000	hrs	ASTM D1693	

Other Properties			
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.

Disclaimer: To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however, we do not assume any liability what so ever for the accuracy and completeness of such information. We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products. No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

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

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

PTT Global Chemical Public Company Limited

555/1 Energy Complex, Building A, 14th - 18th Floor, Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900

Tel: +66(0) 2265-8400 Fax: +66(0) 2265-8500

Revised Date : October 2022