



Revised Date: November 2025

## HD4010W

## High Density Polyethylene Resin

Special Characteristics: InnoPlus HD4010W is bimodal high density polyethylene with excellent environmental stress cracking resistance and designed for easy extrudability of extrusion process for fiber optic cable application, including filler rod and colored jacketing.

Typical Applications: This product is suitable for fiber optic cable application.

This product is not intended for use in other application than recommended.

Typical Properties:

Properties	HD4010W	Unit	Test Method
Physical Properties			
Melt Flow Rate (190 °C, 2.16 kg)	0.5	g/10 min	ASTM D1238
Density	0.957	g/cm <sup>3</sup>	ASTM D1505
Melting Temperature	130	°C	ASTM D1525
Mechanical Properties (Based on compressi	on specimens)		
Tensile Strength at Yield	276	Kg/cm <sup>2</sup>	ASTM D638
Tensile Strength at Break	268	Kg/cm <sup>2</sup>	ASTM D638
Elongation at Break	900	%	ASTM D638
Durometer Hardness	62	Shore D	ASTM D2240
ESCR (10% Igepal, F <sub>0</sub> )	>1,500	Hr	ASTM D1693
Electrical Properties			
Volume Resistivity (500V)	10 <sup>15</sup>	Ohm.cm	ASTM D257
Dielectric Strength (500V/sec)	>20	kV/mm	ASTM D149
Dielectric Constant (60 Hz)	2.3	-	ASTM D150
Dissipation Factor (60 Hz)	0.0031	-	ASTM D150

## Recommendation:

The recommended temperature setting is in the range of 180 – 230  $^{\circ}\text{C}$  for extrusion process.

Sufficient Antioxidant and UV stabilizer should be added to meet cable jacketing for outdoor application.

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 whatsoever for the accuracy and completeness of such information. This product is mainly recommended for fiber optic cable and adding more additive for outdoor applications. 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.

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