

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 ³	ASTM D1505
Melting Temperature	130	°C	ASTM D1525
Mechanical Properties (Based on compression specimens)			
Tensile Strength at Yield	276	Kg/cm ²	ASTM D638
Tensile Strength at Break	268	Kg/cm ²	ASTM D638
Elongation at Break	900	%	ASTM D638
Durometer Hardness	62	Shore D	ASTM D2240
ESCR (10% Igepal, F ₀)	>1,500	Hr	ASTM D1693
Electrical Properties			
Volume Resistivity (500V)	10 ¹⁵	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 °C for extrusion process. Sufficient Antioxidant and UV stabilizer should be added to meet cable jacketing for outdoor application.