

## Description:

Thermacor's Polywrap-A **Seamless** High Density Polyethylene (HDPE) jacket, spirally extruded directly on the polyurethane insulated pipe in a specified thickness, ranging from 100 mils to 250 mils. The watertight jacket is tough, fracture resistant and non-corrosive, ideally suited for installation in frigid Arctic temperatures or in the deserts of the world. HDPE jacketed, preinsulated pipe can be installed below ground or aboveground, as the design conditions require. The HDPE jacket is UV stabilized with carbon black in accordance with ASTM D 3350.

## Material Specification:

### Typical <sup>1</sup> Properties

	Values		ASTM Method
	English Units	SI Units	
Density (Natural)	-	0.944 g/cc	D 4883
Melt Index <sup>2</sup>	-	0.35 g/10 min	D 1238
Melt Index <sup>3</sup>	-	30.0 g/10 min	D 1238
Tensile Strength			
@ Yield (2in/min)	3300 psi	22.8 MPa	D 638
@ Break (2 in/min)	4500 psi	31.0 MPa	D 638
Elongation			
@ Break (2 in/min)	> 800%	> 800%	D 638
Flexural Modulus <sup>4</sup>	115,000 psi	793 MPa	D 790
Notched Izod Impact Strength	10.0 ft-lb/in	0.53 kJ/m	D 256
Hardness (Shore D)	68	68	D 2240
Vicat Softening Point	262 °F	128 °C	D 1525
Brittleness Temperature	< -180 °F	< -118 °C	D 746
Environmental Stress Crack Resistance <sup>5</sup>	> 5000 hrs.	> 5000 hrs.	D 1693
Oxidation Induction Time (OIT) @220 °C	> 10 minutes	> 10 minutes	D 3895

<sup>1</sup> Typical properties will vary within specifications limits

<sup>2</sup> 190 °C /2160 g

<sup>3</sup> 190 °C /21600 g

<sup>4</sup> 2% Secant-Method 1

<sup>5</sup> Condition C Condition, B 100% Igepal

