

<b>Resin Properties</b> <sup>(1)</sup>	<b>Typical Value</b>	<b>ASTM Method</b>
MFI 190°C/21.6 kg (HLMI), g/10 min	7.5	D 1238
Density, g/cm <sup>3</sup>	0.949	D 792
Melting Point, °F	268	D 3417
<b>Mechanical Properties</b> <sup>(1),(2)</sup>		
Notched Izod Impact Strength, ft-lb/in	8	D 256, 1/8" specimen
Elongation @ Break, %	> 800	D-638, Type IV Specimen, 2 in/min
Tensile Strength at Yield, psi	>3,500	D 638, Type IV specimen, 2 in/min
Flexural Modulus @ 2% Strain, psi	150,000	D 790
TPI Certified PENT <sup>(3)</sup> , hrs	> 2500	F 1473
<b>Thermal Properties</b> <sup>(1),(2)</sup>		
Vicat Softening Temperature, °F	255	D 1525
Brittleness Temperature, °F	-180	D 746
Heat Distortion Temperature, °F	172	D 648
Thermal Expansion, in/in/°C	1×10 <sup>-4</sup>	D 696
<b>Pipe Properties</b> <sup>(1)</sup>		
Hydrostatic Design Basis (psi)		
73°F	1,600	D 2837
140°F	1,000	
Minimum Required Strength (MPa)	10	ISO 9080
Cell Classification	445574, 445576	D 3350
Pipe Test Category	CEC	D 2239
Resistance to Rapid Crack Propagation (RCP), S4 <sup>(5)</sup> Critical Pressure (P <sub>c</sub> ), 0°C	> 12 bar (> 174 psi)	ISO 13477
Notched Pipe Test, hrs	> 500	ISO 13479

**Polyethylene:**

High Molecular Weight Bimodal Pipe Resin  
PPI TR4 designation  
PE4710 / PE100 for demanding installations.  
Every batch certified to meet 2500 hrs PENT according to ASTM F1473.

**Characteristics**

- Outstanding high temperature creep rupture strength
- Exceptional slow crack growth resistance certified as exceeding 2500 hrs PENT
- Excellent resistance to rapid crack propagation
- NSF certified to D2513 (gas), CSA B137.4 (gas), CSA B137.1 (water) and CSA C448 (geothermal)
- NSF Standard 14/61 Certified
- FDA Compliant<sup>(4)</sup>

**Applications**

- Gas distribution
- Potable water
- Geothermal
- Industrial and mining
- Sewer / sewer relining
- Gas and oil gathering
- General pipe relining
- Pipe Coating

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.  
 (2) The data listed was determined on compression-molded specimens and may, therefore, vary from specimens taken from pipes.  
 (3) Pennsylvania Notched Tensile Test (PENT)  
 (4) Complies with 21 CFR § 177.1520, Para. (c) 2.1 and 2.2  
 (5) Small-Scale Steady State (110 mm, SDR-11)



1201 Louisiana Street  
Suite 1800  
Houston, TX 77002

P.O. Box 674411  
Houston, TX 77267-4411

Phone: (713) 483-5241  
Fax: (713) 483-5252

**1-800-344-3462**