



	Typical		
Resin Properties <sup>(1)</sup>	<u>Value</u>	<b>ASTM Method</b>	Polyethylene:
MFI 190°C/21.6 kg (HLMI), g/10 min	7.5	D 1238	PE100 / PE4710 / PE3408
Density, g/cm <sup>3</sup>	0.949	D 792	High Molecular Weight
Melting Point, °F	268	D 3417	Bimodal Pipe Resin
Mechanical Properties  (1),(2)  Notched Izod Impact Strength, ft-Ib/in Elongation @ Break, %  Tensile Strength at Yield, psi  Flexural Modulus @ 2% Strain, psi  PENT <sup>(3)</sup> , hrs  Thermal Properties  (1),(2)  Vicat Softening Temperature, °F  Brittleness Temperature, °F  Heat Distortion Temperature, °F  Thermal Expansion, in/in/°C	8 > 800 >3,500 150,000 > 5,000 255 -180 172 1×10 <sup>-4</sup>	D 256, 1/8" specimen D-638, Type IV Specimen, 2 in/min D 638, Type IV specimen, 2 in/min D 790 F 1473  D 1525 D 746 D 648 D 696	<ul> <li>Characteristics</li> <li>Outstanding high temperature creep rupture strength</li> <li>Exceptional slow crack growth resistance</li> <li>Excellent resistance to rapid crack propagation</li> <li>NSF Standard 14/61 Certified</li> <li>FDA Compliant<sup>(4)</sup></li> </ul>
Pipe Properties <sup>(1)</sup>			<u>Applications</u>
Hydrostatic Design Basis, psi			Gas distribution
73°F	1,600	D 2837	Potable water
140°F	1,000		<ul> <li>Industrial and mining</li> </ul>
Minimum Required Strength (MRS), MPa	10	ISO 9080	Sewer and sewer
Cell Classification	445574, 445576	D 3350	<ul><li>relining</li><li>Gas and oil gathering</li><li>General pipe relining</li></ul>
PPI Recommended Designation	PE 4710, PE 3408, PE 100	PPI TR-4	Pipe Coating
Pipe Test Category	C3	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	

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

HDPE XT10 N 08/2006



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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of these products must be guided by the user's own methods for selection of proper formulation. TOTAL PETROCHEMICALS USA, INC. disclaims any responsibility for misuse or misapplication of its products. TOTAL PETROCHEMICALS USA, INC. MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TOTAL PETROCHEMICALS USA, INC. liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.