

## PE4710 HDPE Typical Physical Properties

Property	Test	Typical Value	Units
Material Designation	PPI TR-4	PE4710	-
Cell Classification	ASTM D3350	445574C	-
<b>Pipe Properties</b>			
Density	ASTM D1505	0.96	g/cm <sup>3</sup>
Melt Index (190°C / 2.16kg)	ASTM D1238	0.08 – 0.15	g/10 min
HDB @ 73°F (23°C)	ASTM D2837	1,600	psi
HDB @ 140°F (60°C)	ASTM D2837	1,000	psi
HDS @ 73°F (23°C)	PPI TR-4	1,000	psi
HDS @ 140°F (60°C)	PPI TR-4	630	psi
Color – Carbon Black UV Stabilizer	ASTM D3350	2 minimum	%
<b>Material Properties</b>			
Tensile Strength @ Yield (2 in/min)	ASTM D638	3,400 – 4,000	psi
Elongation @ Break (2 in/min)	ASTM D638	> 700	%
Flexural Modulus	ASTM D790	110,000 – 160,000	psi
Hardness	ASTM D2240	62 – 64	Shore D
PENT	ASTM F1473	> 500	hrs
<b>Thermal Properties</b>			
Thermal Expansion Coefficient	ASTM D696	1.0 x 10 <sup>-4</sup>	in/in/°F
Brittleness Temperature	ASTM D746	< -103	°F
Vicat Softening Temperature	ASTM D1525	255	°F

### Applicable Standards

AWWA C901  
NSF 61  
ASTM F714 or D3035

### Typical Applications

Potable Water Distribution & Transmission, ½”-3”  
Potable Water Distribution & Transmission  
Polyethylene Pipe Controlled Outside Diameter

Typical Values listed are for comparing polyethylene piping resins  
Values determined on samples taken from pipe may vary

June 2010

<i>San Francisco</i>	511 Tunnel Avenue, Brisbane, CA 94005	415-467-4630	FAX 415-467-1010
<i>Los Angeles</i>	1304 E. San Bernardino Ave., San Bernardino, CA 92408	909-799-7800	FAX 909-799-5558
<i>Bakersfield</i>	5221 Gilmore Ave., Bakersfield, CA 93308	661-326-7800	FAX 661-326-7805
<i>Reno</i>	675-B Edison Way, Reno, NV 89502	775-856-1888	FAX 775-856-1844