

**SCLAIRPIPE PE 4710  
 RESIN PROPERTIES**
**DATA SHEET**

Infra Pipe Solutions High Density Polyethylene (HDPE) PE4710 pipe is manufactured from pressure rated polyethylene compounds that meet or exceeds ASTM D3350 requirements and cell classification PE445574C.

Sclairpipe solid wall pipe is produced from HDPE bimodal materials designed specifically for extrusion of premium quality piping products and meeting the requirements of NSF-61, FM and BNQ.

The PE4710 bimodal materials have a minimum PENT value of 2000 hours. The materials are listed in Plastic Pipe Institute's TR-4. Typical PE4710 properties are listed within table 1.0

Typical Properties <sup>1</sup>				
		English Units	SI Units	Test Method
Density	Natural	0.9485-0.949 g/cm <sup>3</sup>	0.9485-0.949 g/cm <sup>3</sup>	ASTM D1505
	Black	0.959 g/cm <sup>3</sup>	0.959 g/cm <sup>3</sup>	ASTM D4883
High Load Melt Index <sup>2</sup>		5.5-8.5 g/10 min	5.5-8.5 g/10 min	ASTM D1238
Tensile Strength	Yield	>3500 psi	>24.1 MPa	ASTM D638
	Break	>5100 psi	>35.1 Mpa	ASTM D638
Elongation	Break	>500 %	>500 %	ASTM D638
Flexural Modulus		146,000 psi	1,006 MPa	ASTM D790
Brittleness Temperature		<-103 °F	<-75 °C	ASTM D746
Hydrostatic Design Basis				ASTM D2837
	73°F(23°C)	1600 psi	11.0 MPa	ASTM D2837
	140°F(60°C)	1000 psi	6.9 MPa	ASTM D2837
Minimum Required Strength			10 MPa	ISO 12162
Notch Tensile (PENT)		>2000 hrs	>2000 hrs	ASTM F1473

<sup>1</sup> Typical properties will vary within specification limits  
<sup>2</sup> 190°C/21,600g

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**Table 1.0** – Typical Properties of Infra Pipe Solutions PE4710 materials  
Design and Installation

For design and installation guidelines of PE pipe refer to the latest edition of the Plastic Pipe Institute Handbook, PE Piping Systems Field Manual for Municipal Water Applications M&I, and ASTM D2774 Standard Practice for Underground Installation of Thermoplastic Pressure Piping. The Handbook and Field Manual are available at [www.plasticpipe.org](http://www.plasticpipe.org), and the ASTM D2774 is available at [www.astm.org](http://www.astm.org).

IPS/DIPS/ISO Pipe Sizes

For standard pipe and DR sizes and pressure ratings, please refer to Sclairpipe® Size and Dimension document in submittals.

**Infra Pipe Solutions**  
 6507 Mississauga Road  
 Mississauga, ON L5N 1A6 CANADA  
 Tel: 1.866.594.7473  
 Fax: 905.858.0208  
**Web: [www.infrapipes.com](http://www.infrapipes.com)**