



POLYMER INDUSTRIES

Densetec PE 100 Pipe grade Typical Properties

Properties	ASTM Test Method	Typical Properties	
		English Units	Metric Units
Physical and Mechanical Properties			
Density	ISO 1183	0.959 g/cm ³	0.959 g/cm ³
Melt Index 190 °C/5.0 kg	ISO 1133	0.31 g/10 min	0.31 g/10 min
Carbon Black content	ISO 6964	2.30%	2.30%
Carbon Black Dispersion	ISO18553	< 3	< 3
Weather Resistant Black	D1248	Class C	Class C
Mechanical Properties			
Tensile stress (Yield)	ISO 6259	>3,500 psi	>24.1 MPa
Tensile strain (Break)	ISO 6259	>500%	>500%
Hydrostatic Strength	ISO 1167		
12.4 MPa 20 °C		>200 hrs	>200 hrs
5.0 MPa 80 °C		>5000 hrs	>5000 hrs
5.4 MPa 80 °C		>1000 hrs	>1000 hrs
Resistance to Rapid Crack Propagation Pc-S-4 (0) °C	ISO 13477	>174 psi	>12 bar
Resistance to Rapid Crack Propagation Tc - S-4at 10 bar	ISO 13477	<1 °F	<-17 °C
Slow Crack Growth PENT (2.4 MPa) 80 °C	ISO 16241	>3000 hrs	>3000 hrs
Stress Crack Resistance - Notched Pipe Test 80 °C	ISO13479 ²	>1000 hrs	>1000 hrs
Tensile Strength - for Butt - Fusion	ISO 13953	Test to failure Ductile	Test to failure Ductile
Thermal Properties			
Oxidation Induction Time	ISO 11357-6	>20 min	>20 min

*The nominal properties reported herein are typical of the product but do not reflect normal testing variance and therefore should not be used for specification purposes