



DATA SHEET

PROTEUS® HDPE – Natural High Density Polyethylene

Property	Units	Test Method	Typical Average Values
Mechanical			
Specific Gravity, 73° F	-	ASTM D792	.96
Yield Point, 73° F	psi	ASTM D638	4,600
Tensile Elongation (at yield), 73° F	%	ASTM D638	12
Tensile Break, 73° F	psi	ASTM D638	4,600
Tensile Elongation (at break), 73° F	%	ASTM D638	400
Tensile Modulus of Elasticity, 73° F	psi	ASTM D638	200,000
Flexural Modulus of Elasticity, 73° F	psi	ASTM D790	174,000
Hardness, Durometer, Shore "D" Scale, 73° F	-	ASTM D2240	70
Izod Impact (notched), 73° F	ft.lb./in.	ASTM D256 Type "A"	1.3
Thermal			
Heat Deflection Temperature 264 psi	°F	ASTM D648	---
Melting Point (crystalline) peak	°F	ASTM D3418	260
Continuous Service Temperature in Air (Max.)(1)	°F	-	180
Electrical			
Volume Resistivity	Ohm-cm	ASTM D257	>10 ¹⁵
Surface Resistivity	Ohm	ASTM D257	>10 ¹⁵
Flammability @ 3.1 mm (1/8 in.) (3)	-	UL94	HB
Miscellaneous			
Water Absorption	% by wt.	ASTM D570(2)	< .01

- (1) Data represent Quadrant's estimated maximum long-term service temperature based on practical field experience.
- (2) Specimens: 1/8" thick x 2" diameter or square.
- (3) **Estimated rating based on available data.** The UL 94 Test is a laboratory test and does not relate to actual fire hazard. Contact Quadrant for specific UL "Yellow Card" recognition number.