



Typical Properties of

**HDPE****High Density Polyethylene**

Process: Extruded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	0.96
Tensile Strength	D638	psi	4,600
Tensile Modulus	D638	psi	120,000
Elongation	D638	%	400
Flexural Strength	D790	psi	--
Flexural Modulus	D790	psi	150,000
Compressive Strength	D695	psi	2,500
Compressive Modulus	D695	psi	--
Hardness, Rockwell	D785	--	R65
Hardness Durometer	--	--	D65
Izod Impact (notched)	D256	ft. lb of notch	1.3
Coeff. of Friction (Dynamic)	--	dry v.s steel	--
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	$7.1 \times 10^{-5}$
Continuous Use Temperature	--	°F	180
Heat Deflection Temperature	D648	°F	110
Glass Transition Temperature	D3418	°F	110
Melting Point	D3418	°F	260
Thermal Conductivity	E1530-11	BTU in/hr ft <sup>2</sup> °F	--
Dielectric Strength	D149	Volts/mil	475
Surface Resistivity	EOS/ESD 511.11	ohm/square	$>10^{15}$
Flammability	UL94	--	HB
Water Absorption, 24 hrs.	D570	% by weight	<.01
Water Absorption, Saturation	D570	% by weight	<.01
Limiting PV (4:1 Safety Factor)	--	--	1,000
K-Factor	--	--	490
FDA Compliance	--	--	Yes

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.  
All values at 73 F unless otherwise stated.