

## HDPE (High Density Polyethylene)

HDPE is used in a variety of applications and industries where excellent impact resistance, high tensile strength, low moisture absorption and chemical and corrosion resistance properties are required.

- Meets FDA/USDA food handling guidelines (natural color)
- Light-weight
- Non-toxic
- Chemical- and corrosion- resistant
- No moisture absorption
- Non-staining
- High tensile strength
- Thermoforming performance

### Applications:

- Light duty chain guides
- Secondary containment
- Thermoformed material handling devices
- Orthotic and prosthetic devices
- Tanks
- Water storage

Property	ASTM Test Method	Units	HDPE
<b>Physical</b>			
Density	D-792	lbs/ft <sup>3</sup>	59.88
Water Absorption	D-570	%	slight
<b>Mechanical</b>			
Yield Point	D-638	psi	4,279
Elongation at Yield	D-638	%	18
Tensile Break	D-638	psi	4,423
Elongation at Break	D-638	%	1,350
Tensile Modulus	D-638	psi	224,812
Flexural Modulus	D-790	psi	166,796
Izod Impact	D-4020	ft-lbs/in	1.3
Tensile Impact	DIN 53448	ft-lbs/in <sup>2</sup>	570
Hardness	D-2240	Type D	67
<b>Thermal</b>			
Melt Point	D-3417	°F	259-267
<b>Electrical</b>			
Volume Resistivity		ohm-cm	>10 <sup>15</sup>
Surface Resistivity	D-257	ohm/square	>10 <sup>15</sup>

*NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.*