



## TECHNICAL DATA SHEET HDPE

	Unit	Test method	HDPE
<b>Physical Properties</b>			
Specific gravity	g/cm <sup>3</sup>	D792	0,941 - 0.965
Specific volume	in <sup>3</sup> /lb	D792	29.4 - 28.7
Water absorption, 24h, 1/8" thick	%	D570	<0.01
<b>Mechanical Properties</b>			
Tensile strength	psi	D638	3,100 - 5,500
Elongation	%	D638	20 - 1000
Tensile modulus	10 <sup>5</sup> psi	D638	0.6 - 1.8
Flexural modulus	10 <sup>5</sup> psi	D790	1.0 - 2.0
Impact strength, Izod	ft-lb/in of notch	D256	0.5 - 20
Hardness, Rockwell R		D785	65
<b>Thermal Properties</b>			
Thermal conductivity	10 <sup>4</sup> cal-cm/sec-cm <sup>2</sup> -°C	C177	11.0 - 12.4
Coefficient of thermal expansion	10 <sup>5</sup> in/in °F	D696	6.1 - 7.2
Deflection temperature at 264 psi	°F	D648	110 - 130
Deflection temperature at 66 psi			140 - 190
<b>Electrical Properties</b>			
Dielectric strength, short time, 1/8" thick	V/mil	D149	450 - 500
Dielectric constant at 1 kHz		D150	2.30 - 2.35
Dissipation factor at 1 kHz		D150	0.0003
Volume resistivity at 73°F, 50% RH	Ω x cm	D257	10 <sup>15</sup>
<b>Optical</b>			
Refractive index		D542	1.54
Transmittance	%	D1003	10 - 50

### Application

- Storage Vessels.
- Wastewater Chemical Process Industry.
- Cutting Boards.
- Butchers preparations.
- Tables.
- Tanks.

### Standard Options

SHEET: Natural – 2000mm x 1000mm & 1mm to 100mm thick.  
 SHEET: Natural – 2440mm x 1220mm & 1.5mm to 70mm thick.  
 SHEET: Black – 2000mm x 1000mm & 1.5mm to 16mm thick.  
 SHEET: Black – 3000mm x 1500mm & 3mm to 100mm thick.  
 ROD: Natural – Ø20mm to Ø250mm in 1000mm lengths.  
 ROD: Black – Ø15mm to Ø200mm in 1000mm lengths.