



# POLYMER INDUSTRIES

## Densetec LDPE Sheet: Typical Properties

Property*	ASTM Test Method	Typical Values	
		English Units	Metric Units
<b>Physical Properties</b>			
Density	D1505	57.62 lb/ft <sup>3</sup>	0.923 g/cc
Melt Index, Condition 190 °C / 2.16 kg	D1238	---	0.2 g / 10 min
Polyethylene Classification	D4976	Group 1, Class 1, Grade 5	Group 1, Class 1, Grade 5
<b>Mechanical Properties</b>			
Tensile Strength @ Yield	D638	1800 psi	12 MPa
Ultimate Elongation	D638	750%	750%
Tensile Impact Strength	D1822	380 ft-lbf/in <sup>2</sup>	800 KJ/m <sup>2</sup>
Compressive Stress @Yield	D695	200 psi	1.38 MPa
ESCR, Condition B (10% Igepal), F <sub>50</sub>	D1693	>1500 hours	>1500 hours
ESCR, Condition C (100% Igepal), F <sub>50</sub>	D1693	>1500 hours	>1500 hours
Durometer Hardness	D2240	55 Shore D	55 Shore D
Flexural Modulus	D790	70,000 psi	480 MPa
<b>Thermal Properties</b>			
Vicat Softening Temperature	D1525	219 °F	104 °C
Heat Deflection Temperature @66 psi	D648	124 °F	51 °C
Brittleness Temperature	D746	< -103 °F	< -75 °C
<b>Electrical Properties</b>			
Dielectric Strength	D149	500 V/mil	19.7 KV/mm
Dielectric Constant	D150	2.28	2.28
Volume Resistivity	D257	2.3 X 10 <sup>15</sup> ohm-in	6 X 10 <sup>15</sup> ohm-cm

\*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.

Typical Properties reported herein were determined on compression molded samples prepared in accordance with Procedure C of ASTM D4703, Annex A1.