

Densetec LDPE Sheet: Typical Properties

| Property* | ASTM Test Method | Typical Values | |
|---|------------------|-------------------------------|-----------------------------|
| | | English Units | Metric Units |
| Physical Properties | | | |
| Density | D1505 | 57.62 lb/ft ³ | 0.924 g/cc |
| Melt Index, Condition 190 °C / 2.16 kg | D1238 | --- | 1.3 g / 10 min |
| Polyethylene Classification | D4976 | Group 1, Class 1, Grade 5 | Group 1, Class 1, Grade 5 |
| Mechanical Properties | | | |
| Tensile Strength @ Yield | D638 | 2400 psi | 16 MPa |
| Ultimate Elongation | D638 | 600% | 6000% |
| Tensile Impact Strength | D1822 | 380 ft-lbf/in ² | 800 KJ/m ² |
| Compressive Stress @Yield | D695 | 200 psi | 1.38 MPa |
| ESCR, Condition B (10% Igepal), F ₅₀ | D1693 | >1500 hours | >1500 hours |
| ESCR, Condition C (100% Igepal),F ₅₀ | D1693 | >1500 hours | >1500 hours |
| Durometer Hardness | D2240 | 55 Shore D | 55 Shore D |
| Flexural Modulus | D790 | 50,000 psi | 340 MPa |
| Thermal Properties | | | |
| 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 |
| Electrical Properties | | | |
| Dielectric Strength | D149 | 500 V/mil | 19.7 KV/mm |
| Dielectric Constant | D150 | 2.28 | 2.28 |
| Volume Resistivity | D257 | 2.3 X 10 ¹⁵ ohm-in | 6 X 10 ¹⁵ 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.