



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## LDPE Semi-Crystalline Commodity Plastic

LDPE, or low-density polyethylene, is a lightweight, flexible, and recyclable semi-crystalline thermoplastic. It is made from ethylene monomers and is used to make many plastic products. LDPE is resistant to chemicals – making it safe for food storage and a good electrical insulator in low-temperature environments. Common applications include packaging, laboratory equipment, computer components, and cable conduits.

The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

| PROPERTIES              | ASTM*   |            | TYPICAL VALUES |                  |
|-------------------------|---|------------|----------------|------------------|
|                         | Test Method                                   | Units      | LDPE           |                  |
| <b>PHYSICAL</b>         | Specific Gravity                              | ASTM D792  |                | 0.92             |
| <b>THERMAL</b>          | Melting Temperature: DSC, 10°C(50°F)/min      | ASTM D3418 | °F             | 230              |
|                         | Heat Deflection Temperature (264 PSI)         | ASTM D648  | °F             | 160.0            |
|                         | Continuous Service Temperature in Air 20 hrs. |            | °F             | 160.0            |
|                         | Flammability: UL94 (3mm (1/8 in.))            |            |                | HB               |
| <b>MECHANICAL</b>       | Ultimate Tensile Strength                     | ASTM D 638 | PSI            | 1,700            |
|                         | Tensile Strain at Yield                       | ASTM D638  | %              | 100              |
|                         | Tensile Strain at Break                       | ASTM D638  | %              | 400              |
|                         | Tensile Modulus of Elasticity                 | ASTM D638  |                | 57               |
|                         | IZOD Impact Strength: Notched                 | ASTM D256  | KSI            | 0                |
|                         | Flexural Modulus                              | ASTM D790  | ft-lb/in       | 29               |
| Shore Hardness: D Scale | ASTM D2240                                    | KSI        | 54.00          |                  |
| <b>ELECTRICAL</b>       | Surface Resistivity                           | ASTM D257  | Ohms/sq        | 10 <sup>14</sup> |

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.