

LDPE Polymer

Low-Density Polyethylene

Overview-

Low-density polyethylene is a tough yet inexpensive thermoplastic that has found its way into many daily uses. Having a more branched (and less crystalline) morphology than high-density polyethylene (HDPE), LDPE excels in certain areas over HDPE. LDPE possesses excellent impact strength at low temperatures and thus resists breaking; it is also highly flexible. LDPE is lighter in weight than HDPE. LDPE has excellent dielectric properties for electrical uses such as insulation and cable wrap.

Similar to HDPE, LDPE shows good chemical and water absorption resistance, but it is more transparent than HDPE. These features have made LDPE popular for use in food packaging and plastic bottles.

LDPE is easily processable and a cost-convenient way to meet a variety of plastic needs. Custom LDPE extruded tubing is available upon request.



We routinely partner with our customers to help them find the solution that is just right for them. Contact our Sales Team to help you find exactly which LDPE product is best for your next project.

APPLICATIONS

- Electrical and Mechanical Protection
- Hose or Pipe liners
- Fluid transfer tubing
- Medical device

AVAILABLE PRODUCTS

- Extruded Tubing
- Dual Tube
- Special Profile
- Multi-lumen
- Metric Tubing

QUICK SUMMARY OF PROPERTIES

- Low water absorption
- Chemical resistance
- Good dielectric strength
- Impact strength
- Flexible



DIELECTRIC STRENGTH



CHEMICAL RESISTANCE



IMPACT RESISTANCE



LDPE

The information presented in this publication is believed to be accurate and is not intended to constitute a specification. Property characteristics are dramatically impacted by geometry and processing method, thus properties of extruded parts may vary. In some instances, data may not be available for publication and will be notated as "na" where applicable.

These tables are meant to serve as a general guideline only. Users should evaluate the material to determine suitability for their own particular application.

PHYSICAL		ASTM	LDPE
	Density (g/cm ³)	D1505	0.9215
MECHANICAL		ASTM	LDPE
	Ultimate Tensile Strength (MPa)	ISO 527	25
	Elongation at Break (%)	ISO 527	417
	Coefficient of Friction	D1894	0.70
THERMAL		ASTM	LDPE
	Melt Temp (°C)	DOW Method	111

