

LDPE stands for Low-Density Polyethylene. It is a flexible and lightweight thermoplastic material with a lower density compared to other polyethylene variants. LDPE has good resistance to moisture, chemicals, and impact, making it suitable for various applications. It is commonly used in packaging films, plastic bags, squeeze bottles, tubing, and coatings.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic
Chemical Name	LDPE Low Density Polyethylene
Additives	Unfilled
Color	Natural
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.033
Water Absorption, 24 hrs, Immersion,% by wt.	<0.01
Heat Deflection Temp,°F at 263psi	116
Max Continuous Operating Temp,°F	160
Flammability Rating,UL94	HB
Dielectric Strength,V/mil	470-700
Dielectric Constant at 1 MHz	2.25-2.30
Surface Resistivity,ohm/square	>10 ¹⁵

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Modulus,ksi	57
Compressive Strength,ksi	1.4
Compressive Modulus,ksi	54
Flexural Modulus,ksi	29
Elongation at Break	100%
Notched Izod Impact Strength,ft-lb/in	No Break

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.