

TECHNICAL DATA SHEET

LDPE

LDPE is one of the fastest growing plastics today. It is characterized by good toughness and flexibility, relatively low heat resistance, low temperature impact resistance and clarity in film form. It has good resistance to chemical attack. At higher temperatures, it becomes increasingly more susceptible to attack by aromatic, chlorinated and aliphatic hydrocarbons.

Polyethylene is susceptible to stress cracking when exposed to ultraviolet and some chemicals. Wetting agents such as detergents accelerates stress cracking. Some copolymers of LDPE are available with improved stress-crack resistance.

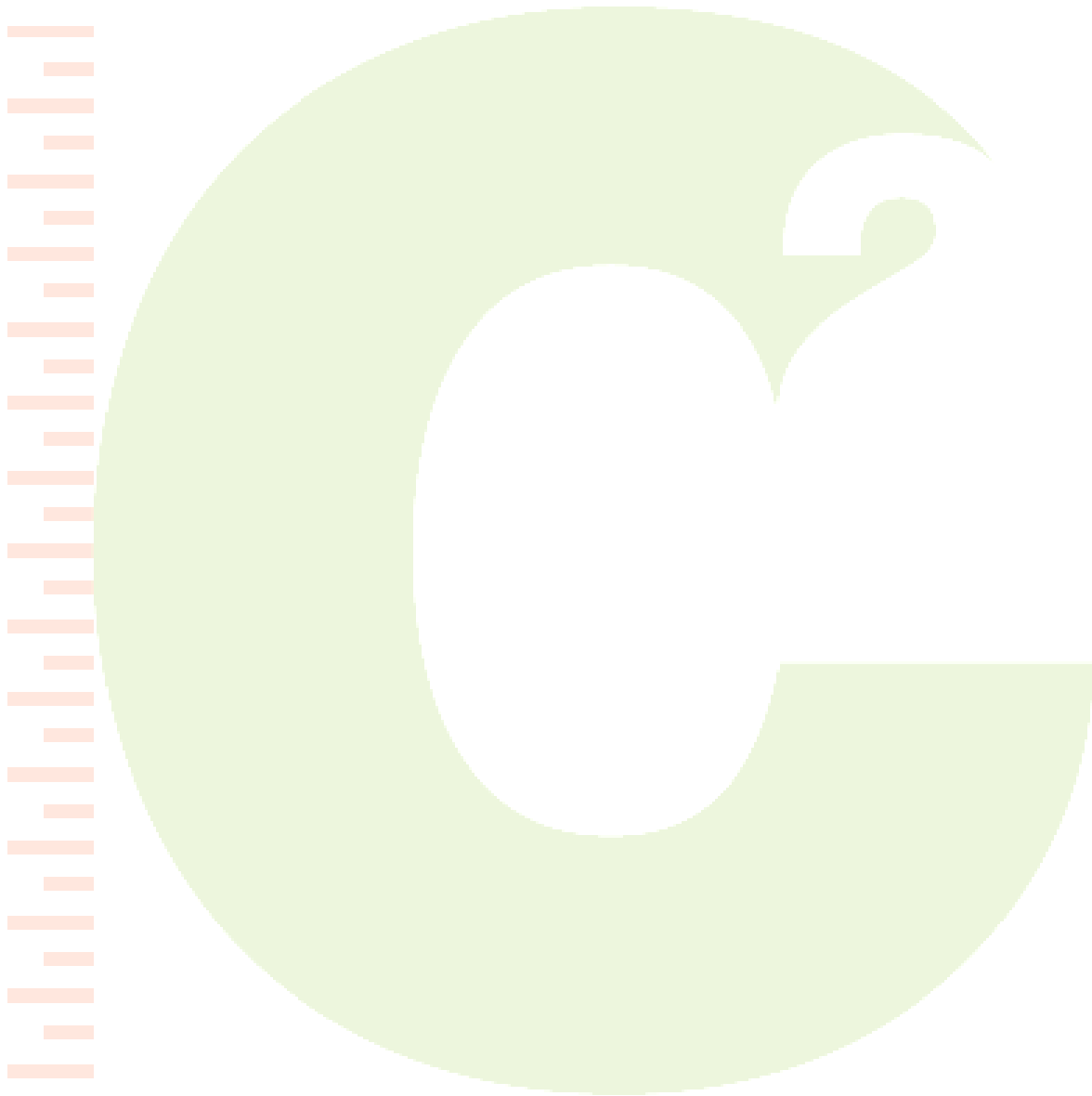
ASTM Test	Properties	VALUES	UNITS
PHYSICAL			
D792	Specific Gravity	0.910-0.925	
D792	Specific volume	30.4-29.9	in ³ /lb
D570	Water absorption	<0.01	24 h, 1/8 –in thk %
MECHNAICAL			
D638	Tensile Strength	600-2,300	Psi
D638	Elongation	90-800	%
D638	Tensile Modulus	0.14-0.38	10 ⁵ psi
D790	Flexural Modulus	0.08-0.60	10 ⁵ psi
D256	Impact Strength	No break	Izod (ft-lb/in of notch)
D785	Hardness	10	Rockwell R
THERMAL			
C177	Thermal Conductivity	8.0	10 ⁴ cal-cm/sec-cm ² - °C
D696	Coefficient of thermal expansion	5.6-12.2	10 ⁻⁵ in/in- °F
D648	Deflection Temperature At 264 psi	90-105	°F
	At 66 psi	100-121	°F
ELECTRICAL			
D149	Dielectric strength	460-700	(V/mil) short time, 1/8-in thk
D150	Dielectric constant	2.25-2.35	At 1 kHz
D150	Dissipation factor	0.0002	At 1 kHz
D257	Volume resistivity	10 ¹⁵	At 73°F, 50 % RH
D495	Arc resistance	135-160	S
OPTICAL			
D542	Refractive index	1.51	-
D1003	Transmittance	4-50	%

LDPE Applications

- °Packing Application
- °Soft Goods
- °Wire Insulation
- °Tote Boxes

- ° Industrial bags
- °Toys
- ° Batery Jars
- °Large agricultural tanks

- ° Shrink bundling
- °Hot-melt Adhesives
- ° Medical Equipment
- °Produce and Garment bags



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