

RP-LDPE DATA SHEET

Reprocessed Low Density Polyethylene

RP-LDPE is a soft, tough material with good clarity and high chemical resistance. LDPE remains flexible and retains impact strength at very low temperatures. High melt flow (low viscosity) grades are injection molded into products such as containers and lids. Low melt flow (high viscosity) grades are used in blown films for bags and construction, extruded sheeting and pipe, and blow molded containers such as squeeze bottles. Linear Low Density (LLDPE) resins exhibit higher strength and stiffness than traditional LDPE resins for many of these same applications.

PHYSICAL	ASTM/ Method	RP-LDPE
Reinforcement content (%)	TPG WI	-
Specific gravity	D 792	0.92
Melt flow 190/2.16 (g/10 min)	D 1238	1.0*
Water absorption, 24 hours (%)	D 570	nil
Mold shrinkage – 1/8" specimen (in/in)	D 955	0.030

MECHANICAL @ 73°F

Tensile strength (psi)	D 638	1,700
Elongation @ yield (%)	D 638	15
Elongation @ break (%)	D 638	>300
Tensile modulus (kpsi)	D 638	24
Flexural modulus, tangent (kpsi)	D 790	30
Flexural strength (psi)	D 790	1,400
Izod impact, notched (ft-lbs/in)	D 256	no break
Gardner impact, 1/2" tup (in-lbs)	D 5420	>200
Hardness, shore (D-scale)	D 1415	52

THERMAL

Deflection temperature, 66psi (°F)	D 648	160
Deflection temperature, 264psi (°F)	D 648	-