POLIFIL® RP-HDPE DATA SHEET

DOING THE NEEDFUL SINCE 1973

Reprocessed High Density Polyethylene

Polifil® RP-HDPE is a moderate stiffness material that retains excellent toughness. HDPE exhibits outstanding chemical resistance and environmental stress crack resistance. Injection molding applications range from small containers and lids to large crates and bins. Low melt flow versions are used for blow molded bottles for milk, cosmetics, and chemicals, and in extruded items such as pipes and profiles. High molecular weight (HMW) grades are increasingly used for high strength blown films, and large blow molded items such as drums, water tanks, and toys.

PHYSICAL	ASTM/ Method	Polifil® RP-HDPE
Reinforcement content (%)	TPG WI	-
Specific gravity	D 792	0.96
Melt flow 190/2.16 (g/10 min)	D 1238	0.1-5*
Water absorption, 24 hours (%)	D 570	nil
Mold shrinkage – 1/8˝ specimen (in/in)	D 955	0.028
MECHANICAL @ 73°F		
Tensile strength (psi)	D 638	3,500
Elongation @ yield (%)	D 638	12
Elongation @ break (%)	D 638	>200
Tensile modulus (kpsi)	D 638	170
Flexural modulus, tangent (kpsi)	D 790	150
Flexural strength (psi)	D 790	4,000
Izod impact, notched (ft-lbs/in)	D 256	1.6
Gardner impact, 1/2˝ tup (in-lbs)	D 5420	>200
Hardness, shore (D-scale)	D 1415	64
THERMAL		
Deflection temperature, 66psi (°F)	D 648	160
Deflection temperature, 264psi (°F)	D 648	90

**melt flow may be specified*