

Prime HMWPE 1000 Swirl

Our Prime HMWPE 1000 Swirl material consists of a HMWPE substrate with a two-color swirl cap of HMWPE. The swirl is on one side of the sheet.

Good rigidity and impact strength even at low temperatures. These properties make this product ideal for thermoforming large parts.

Customization

Prime HMWPE 1000 Swirl is a semi-crystalline material, so good forming practices should be used when working with this material. Forming temperature is 310–360°F. Mold temperature should be 160-200°F. Aluminum, grit blasted molds are preferred and should be designed with a moat if possible. Mold shrink is .016 to .028 in./in.

Prime HMWPE 1000 Swirl can be color matched to meet your specific requirements through our vertical integration with Primex Color, Compounding & Additives.

Sustainability

Sustainability includes considering the product's circularity or end of life during the design of the finished product. Prime HMWPE 1000 Swirl is a polyethylene (recycle code 2) that can be recycled as a post-industrial or post-consumer product. Contact your Primex Territory Business Manager or check with local recycling facilities to determine where it is collected and recycled.

Primex Sustainability: A better tomorrow, starting today!



Prime HMWPE 1000 Swirl | Data Sheet

Prime HMWPE 1000 Swirl is on one side of the sheet. The thickness can be varied to suit your specific material requirements and draw ratios.

Applications

Some ideal applications for Prime HMWPE 1000 Swirl include playground equipment, camouflage deer blinds, canoes, and other sporting equipment.

Finishing

Prime HMWPE 1000 Swirl can be fabricated by using techniques such as drilling, routing, punching, sawing, and cutting with a die, laser, or water jet. Mechanical screws and other type of fasteners can be used. The CLTE is high, therefore, movement of the part must be considered.

Colors, Textures, and Capabilities

Prime HMWPE 1000 Swirl is extruded in gauges of .100 to .300 and up to 90" in width. Textures include; Smooth or Levant II.

Property	Method	Value	Unit
Specific Gravity	D1505	.949	
Melt Flow	D1238	10	g/10 min
Tensile @ Yield	D638	3,600	psi
Ultimate Elongation	D638	>600	%
Flexural Modulus	D790	170,000	psi
ESCR	D1693	>600	hrs.
Brittleness Temperature	D746	<-131	°F
Vicat Softening Point	D1525	256	°F

FDA and UL compliant materials available upon request.

Prime HMWPE 1000 Swirl	Very High	High	Avg.
Impact Strength	*		
Low Temperature Impact Strength	*		
Tensile Strength		*	
Flexural Modulus			*
Heat Deflection Temperature			*