



Prime HMWPE 1000 Swirl material consists of a HMWPE substrate with a three-color swirl cap of HMWPE. The swirl can be on one or both sides of the sheet. The thickness can be varied to suit your specific material requirements and draw ratios.



Prime HMWPE 1000 Swirl

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

Property	Test Method	Value	Unit
Specific Gravity	D-1505	.949	
Melt Index	D-1238	10 HLMI	g/10min
Tensile @ Yield	D-638	3,600	psi
Ultimate Elongation	D-638	>600	%
Flexural Modulus	D-790	170,000	psi
ESCR	D-1693	>600	hrs.
Vicat Softening Point	D-525	256	°F
Brittleness Temperature	D-746	<-131	°F

Complies with FDA Regulation 21 CFR 177.1520
 Complies with UL 94 HB @ > .060 in.
 Complies with FMVSS # 302 @ > .060 in.

Applications:

Applications so far have consisted of 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.

Processing:

This is a crystalline material, therefore, good forming practices should be applied when forming this product. Forming temperature is 310-360°F. Mold temperature should be 160-200°F. Aluminum mold with grit blasted surface is preferred. The tool should be designed with a moat on the outside of the trim line. Mold shrink is .016 - .028 in/in.

Colors, Textures and Capabilities:

Prime HMWPE 1000 Swirl can be color matched to meet your specific requirements. Prime HMWPE 1000 Swirl is extruded in gauges of .100 to .300 and up to 90" in width. Textures include; Smooth or Levant II.