

## 1063 Kevlar® Veil



**Overview:** Veil mats are thin plies of continuous strand fibers that are looped randomly throughout the roll of the material. It has the consistency of tissue paper. A light binder is present to hold the veil together.

While it is not intended for structural use, it has two very important functions. First, it can be placed in the mold directly behind the surface coat to minimize the print through of the heavier reinforcing cloths applied later. This thin out coating also permits some surface sanding of finished parts without cutting into the reinforcing fabric below.

The second largest use is with sandwich cores. A veil mat may be placed directly over the core to maintain the optimum bond-line thickness. Veil is also effective at keeping excess resin from draining into cells of honeycomb cores when a vacuum is not being used.

Kevlar® veil is a lightweight, non-woven material that helps block print-through while still offering abrasion and impact resistance. Though commonly used in Kevlar laminates, it can also be paired with carbon fiber or fiberglass to provide the benefits of Kevlar® while adding minimal weight and thickness.

Available in 1, 3, and 5 yard packages, custom cuts starting at 10 yards, and full rolls.

### General Properties for Kevlar®/Carbon Hybrid:

- Excellent thermal & dimensional stability
- Performs with no strength loss up to temperatures of 320° F for extended periods.
- Lighter in weight than E-Glass with higher specific strengths.
- Sensitive to direct exposure from UV light; however, demonstrates little or no change in a composite when it is indirectly exposed to UV light.
- Will not melt or support combustion, however, it will begin to caramelize at approximately 800° F

### Specific Product Properties:

<b>Basis weight</b>	0.25 oz/yd <sup>2</sup>
	8.5 g/m <sup>2</sup>
<b>Thickness</b>	3.3 mil
	.08 mm
<b>MD Tensile</b>	3.0 lb/inch
<b>CD Tensile</b>	3.0 lb/inch
<b>MD Tensile</b>	0.52 kN/m
<b>CD Tensile</b>	0.52 kN/m
<b>Fiber</b>	para aramid

### Weave Pattern Rankings:

	<b>Thickness</b>	<b>Weight</b>	<b>Strength</b>	<b>Porosity</b>
Plain	3	1	3	1
Twill	2	1	4	2
4-Harness Satin	3	1	4	2
8-Harness Satin	1	1	7	4
Leno	7	7	1	7
Mock Leno	6	1	2	4

This was a scale from 1 to 7, with 1 being the lowest and 7 being the highest

### Resin Compatibility:

<b>Part Number</b>	<b>Polyester Resin</b>	<b>Vinyl Ester Resin</b>	<b>System 2000 Epoxy</b>
549		X	P
1063		X	P
531		X	P
532		X	P
533		X	P

An "X" means the fabric is compatible with the resin.

A "P" is for the primary resin for the fabric.

The compatibility is based on Fibre Glast Development's resins only.