

Vizilon® Thermoplastic Composite Sheet

Product Information

DuPont™ Vizilon® thermoplastic composites offer a range of heat-stabilized, glass-reinforced, polyamide-based woven fiber composite sheets and short fiber over-molding resins.

Thermoplastic composites are suited for structural parts combining lightweighting and functional integration, along with being optimized for heat aging resistance and over-molding adhesion.

Available Material

Vizilon® Sheets	Weave	Polymer	Glass (% Mf)
SB63G1-T0.5	2/2	PA66-6	63
SB63G1-T1.0	2/2	PA66-6	63
SB63G1-T1.5	2/2	PA66-6	63
SB75G1-T1.6	2/2	PA66-6	75
SB75G1-T2.0	2/2	PA66-6	75
SU63G1-T0.5	4/1	PA66-6	63
SU63G1-T1.0	4/1	PA66-6	63
SU63G1-T1.5	4/1	PA66-6	63
SU75G1-T1.6	4/1	PA66-6	75
SU75G1-T2.0	4/1	PA66-6	75

Note: Vizilon® sheets are available in widths up to 1440 mm and in various lengths.

Vizilon® Over-molding Resins	Polymer	Glass (% Mf)
P30G1-6Y	PA66	30
P50G1-K1	PA66	50
P30G2-6T	PA6	30
P50G2-7B	PA6	50
P45G4-5M	PPA	45

Mechanical Properties

Products	Density	E-Modulus (GPa) at 23° C	Strength (MPa) at 23° C
Steel 8000 Series	7.8	205	600–800
Aluminium	2.7	70	250
Zytel® 70G50HSLA*	1.57	17	250
Vizilon® SB75G1-T1.5	1.98	28	498
Vizilon® SU75G1-T1.5, 0°	1.98	38	837
Vizilon® SU75G1-T1.5, 90°	1.98	17	152

Note: Testing conducted on dry as molded samples. Properties on a wide temperature range and moisture content are available on request.

*Values corrected for non-optimal fiber orientation by factor 0.8.

Thermal Properties

Material	Description	CLTE 10–6 m·m–1·K–1, -30° C to 30° C	
		0 deg.	90 deg.
Steel	Steel 8000 Series	13	13
Aluminium die-cast	A380 die-cast	18–26	18–26
Zytel® 70G50HSLA	PA66 GF 50%	8–19	59–100
Vizilon® SB75G1-T1.5	PA66 GF 75% with a 2-2 twill weave	11	13
Vizilon® SU75G1-T1.5	PA66 GF 75% with a 4-1 plain weave	5	20

For more information, visit www.vizilon.dupont.com

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