

02C420K- CARBON FABRIC- 420gr/sqm 12K TWILL 2/2

DESCRIPTION:	Carbon Fabric Woven - 420gr/sqm 12k Twill 2/2		
PACKAGING:	Fabric tightly wound onto cardboard tubes; wrapped in clear plastic; packaged into double-walled cardboard boxes; roll is suspended in center of box by end-plates on both ends of tube; roll held tight in box by cardboard shims filling free end-play.		
SPEC TYPE	SPEC DESCRIPTIONS	DEFINITIONS	
"FABRIC"	FABRIC "METRIC" SPECS:	FABRIC DEFINITIONS:	
Areal Weight	gram/sq.m. =420 gr. (± 5%)	The weight of the fabric per square meter or square yard.	
Roll Length/Width	meters(+/-)= 100m.(±0.5) centimeters(+/-)= 100 cm(± 2,5%)	Roll linear length, plus+ or minus tolerance.	
"WEAVE"	WEAVE DETAIL SPECS:	WEAVE DEFINITIONS:	
Style / Pattern	Twill 2/2	Weave style or pattern of woven fabric or material.	
"FIBER"	FIBER DESCRIPTION SPECS:	FIBER DEFINITIONS:	
Type / Model	WARP = "12K HS Carbon Fiber" 300GR WEFT = "12K HS Carbon Fiber" 300GR	Fiber manufacturers product or ID number.	
Tow ("k" if Carbon)	Warp = 12K / Weft = 12K	Continuous filaments per fiber bundle. (K = 1000)	
Filament Count	Warp = 12,000 / Weft = 12,000	The number of filaments per tow.	
Filament Diameter(micron)	Warp = 5 / Weft = 5	The diameter of the filament.	
Density	g/cm ³ = 1.79	Mass per unit volume in ³ . Typically grams per cm cubed.	
MASS (Yield)	tex (g/1000m) = 800	g/m = ND	Measurement of the amount of mass per unit length.
Tensile Strength (min) WARP/WEFT	Ksi = 610	Mpa = 4200	The force at which fiber breaks measured by the area width.
Tensile Modulus (min) WARP/WEFT	Msi = 34,8	Gpa = 240	Measurement of the elastic stiffness.
Tensile Strain (min)	% =	1,6	Elongation of fiber at breaking point (Percentage of stretch)
Sizing Level	% =	1.20%	Percentage of chemical treatment versus total fiber weight.
Electrical Resistivity	10-3 /ohms/cm=	1.55	Electrical resistance in ohms per length specified
Carbon Assay	% =	95%	Percentage of actual carbon content in fiber.
Specific Gravity	gm/cm ³ =	1.79	Compare Density: Water has a Specific Gravity of 1.0