



VECTRAN®

FIVE TIMES STRONGER THAN STEEL

PROPERTY RETENTION OVER A WIDE TEMP RANGE · LOW MOISTURE REGAIN

VECTRAN® (VEN) is a high-performance multifilament yarn spun from liquid crystal polymer. Pound for pound Vectran® fiber is five times stronger than steel and ten times stronger than aluminum, which makes it the material of choice in demanding applications where other fibers fail to meet performance requirements. Our product also demonstrates minimal moisture absorption, outstanding cut and abrasion resistance, high dielectric strength, and melt temperature of 625°F. Vectran® sleeving is used in a wide range of applications, including aerospace, high tech research, and industrial protection. Vectran's® molecular structure not only makes it one of the world's strongest materials but Vectran® is also invisible in MRI systems.

SIZING CHART

Nominal Size	Part #	Min Expansion	Max Expansion	*Put-Ups		Available Colors	Lbs/ 100'
				M	L		
1/8"	VEN0.13NT	7/64"	9/64"	100'	500'	1	0.36
1/4"	VEN0.25NT	13/64"	19/64"	100'	500'	1	0.72

*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



FEATURES

Material	Liquid Crystal Polymer
Grade	VEN
Wall Thickness	.025"
Drawing Number	TF001VEN-WD
Cutting	Flexo® Aramid Shears

COLORS



Natural (NT)

CERTIFICATIONS



*Vectran® is a registered trademark of the Kuraray Co., LTD



ABRASION

Abrasion Resistance	HIGH
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	77°F
Humidity	72%
First Broken Filament	200 Test Cycles
Approximately 10 Broken Filaments	500 Test Cycles
Material Destroyed, Visible Hole	1,000 Test Cycles
Pre-Test Weight	8,654.4 mg
Post-Test Weight	8,133.9 mg
Test End Loss Of Mass Point Of Destruction	520.5 mg

PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	NA
Flammability Rating	Self Extinguishing
Recommended Cutting	Flexo® Aramid Shears
Colors	1
Wall Thickness	.025"
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	20
Specific Gravity (ASTM D-792)	1.4
Moisture Absorption % (ASTM D-570)	<.005
Hard Vacuum Data (ASTM E-595 at 10-5 torr)	NA
TML	.21
CVCN	.00
WVR	.00
Smoke D-Max (ASTM E-662)	NA
Outgassing	Med
Oxygen Index (ASTM D-2863)	>30

FLAMMABILITY

Rating	Self Extinguishing
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OPERATING TEMPERATURES

Auto-Ignition	>1,004°F / >540°C
Maximum Continuous (Mil-I-23053)	572°F / 300°C
Minimum Continuous (Mil-I-23053)	NA

CHEMICAL RESISTANCE

1=No Effect 2=Little Effect 3=Affected 4=More Affected 5=Severely Affected

Aromatic Solvents	NA
Aliphatic Solvents	NA
Chlorinated Solvents	1
Weak Bases	NA
Salts	NA
Strong Bases	NA
Salt Water (O-S-1926)	1
Hydraulic Fluid (MIL-H-5606)	1
Lube Oil (MIL-L-7808)	1
De-Icing Fluid (MIL-A-8243)	NA
Strong Acids	NA
Strong Oxidants	NA
Esters/Ketones	NA
UV Light	NA
Petroleum	1
Fungus (ASTM G-21)	NA
Halogen Free	NA
RoHS	Yes
SVHC	NA