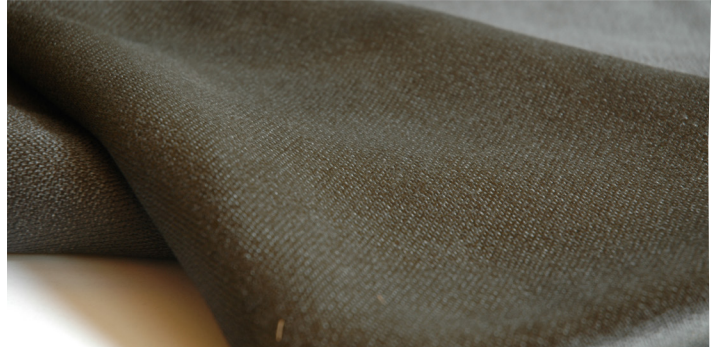


ZOLTEK™ PXF B CARBON FABRICS

DESCRIPTION

ZOLTEK PXF B carbonized fabrics are produced from 100% ZOLTEK OX fabrics; being continuously carbonized and supplied in roll form. ZOLTEK PXF B carbonized fabrics can be used in many applications, including stationary energy storage batteries, fire protective insulation, high temperature and chemically corrosive applications and as carbon composite materials for friction end uses. Customers can apply their own post treatments and the carbonized fabric is easy to cut and process for specific end use applications.



MATERIAL OVERVIEW	PXF B PW03 PLAIN WEAVE FABRIC		PXF B SW08 SATIN WEAVE FABRIC	
	SI	US	SI	US
Fiber Precursor Type	PAN			
Fabric OX Yarn Count	2/27 Wc		2/10 Wc	
Fabric Construction (Warp x Weft)	210 x 170 Yarns / 10 cm	53 x 43 Yarns / inch	166 x 154 Yarns / 10 cm	42 x 39 Yarns / inch
Areal Weight ¹	143 g/m ²	4.2 oz/yd ²	363 g/m ²	10.7 oz/yd ²
Thickness ²	0.45 mm	0.017 in	1.4 mm	0.055 in
Fabric Bulk Density	0.32 g/cm ³	0.0116 lb/in ³	0.26 g/cm ³	0.009 lb/in ³
Roll Width	69 cm	27 in	97 cm	38 in
Roll Length ³	73 m	80 yds	36 m	40 yds
Fiber Diameter	7 - 9 μm			
Fiber Density	~1.78 g/cc (~0.0643 lb/in ³)			
Carbon Content	~95%			
Electrical Resistivity ⁴	4.7 Ω mm		7.3 Ω mm	
BET Surface Area	~1 m ² /g			
Open Porosity ⁵	82%		85%	
Tensile Strength in Warp / Weft Direction ⁶	19.0 MPa/20.8 MPa		10.8 MPa/10.5 MPa	
Elongation in Warp / Weft Direction ⁶	2.9% / 3.9%		5.9% / 13.7%	
Trace Metals	Fe < 20 ppm, Na < 30 ppm, Ca < 20 ppm			

¹All data provided are typical properties and are not specification values. (Revision Date 03.11.20)



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- 1 – Areal weights are determined from 100 mm diameter circular samples.
- 2 – Thickness is determined via ASTM D1777, at a compression level of 4.14 kPa.
- 3 – Due to the manufacturing process, individual roll lengths will vary.
- 4 – Z-direction electrical resistivity is determined at 1 A current with 30 x 30 mm samples, at 20% compression, in the thickness direction.
- 5 – Open porosity is calculated as $1 - \frac{w_a}{d * \rho_c}$ where w_a is the felt areal weight, d is the felt thickness and ρ_c is the fiber density.
- 6 – Tensile and Elongation properties are tested according to ASTM D 5035-06.

The properties listed in this datasheet do not constitute any warranty or guarantee of values. This information should only be used for the purposes of material selection. Please contact us for more details.

TYPICAL PACKAGING

All fabrics are wound on 3" diameter cores, sealed in plastic, and placed in a cardboard box. Listed below are the standard box dimensions. All dimensions are internal measurements.

26 inch fabric width: 12" x 12" x 37"

37 inch fabric width: 12" x 12" x 50"

SAFETY

Obtain, read, and understand the Material Safety Data Sheet (SDS) before use of this or any other ZOLTEK product.

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