AvCarb®

CARBON FIBER PAPER

FOR ELECTROCHEMICAL APPLICATIONS

"AvCarb is committed to providing the best performing materials and world-class technical support to innovators in the hydrogen fuel cell market."

Ray Mosse

President and CEO
AvCarb Material Solutions

Product Highlights:

- Thermal + Chemical Durability
- Gas permeability
- Conductivity
- Physical property uniformity
- Cost effective

PRODUCT OVERVIEW

AvCarb carbon fiber papers consist of high purity carbon fibers bonded together using a porous carbon matrix.

Delivered on rolls, this material is used in demanding electrochemical applications including specialty batteries, fuel cells, and electrolyzers. AvCarb carbon fiber papers are unparalleled in their ability to meet the rigorous demands of electrochemical applications, including catalyst and microporous layer support, effective transport of gases and liquids, and conduction of heat and electricity in corrosive and high temperature environments.

PTFE treated carbon fiber papers are available for applications in which liquid water repellency is required.

Contact us today to receive complimentary samples!

Quick Connections:

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Version 1.0

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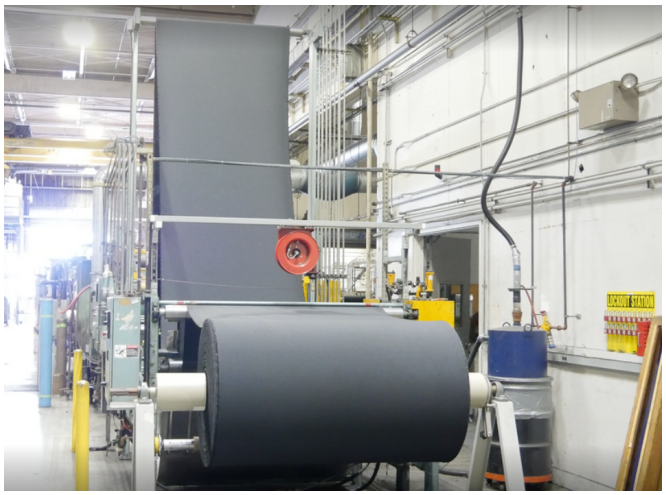
Paper Technical Data

Properties	Units	EP40	P75	EP55	EP40T	P75T	EP55T
Nominal Thickness							
(@5.0N/cm²)	µm	184	232	262	191	243	270
Nominal Basis Weight							
	g/m²	36	71	51	40	82	57
Break Strength							
Machine Direction	N/m	1800	2100	2300	2300	4200	3900
Stiffness							
Machine Direction	Taber	11	24	27	12	29	37
Bulk Density							
(@ 0.69N/cm²/1psi)	g/cm³	0.19	0.30	0.20	0.21	0.34	0.21
Air Permeability (Gurley)							
Through-Plane Resistivity	sec/100c	4.0	16.0	5.0	3.5	18.0	4.0
PFTE Treatment							
	N/A	No	No	No	Yes	Yes	Yes

Carbon Fiber Paper

PFTE Treatments

- AvCarb Material Solutions offers carbon fiber papers with standard PTFE treatments for water repellency
- Custom PTFE treatments are available for all AvCarb Gas Diffusion Substrates at levels 5%–35% PTFE by weight
- Custom MPLs are also available, please contact us for details



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