

— TECHNICAL DATA SHEET

Carbon Fiber Soft Felt



OVERVIEW

AYD has decades of experience in carbon materials. The CarboniteX® soft felt is made from high-quality viscose-based long-fiber precursor and processed through AYD's in-house carbonization, graphitization, and deep purification lines. This enables full-process control from precursor to finished felt. Its needle-punched structure offers strong integrity and low thermal conductivity, making it suitable for vacuum, inert, reducing, and reactive atmospheres.

APPLICATIONS

Single Crystal Growth (CZ / FZ)

Furnace Linings and Shields

Silicidation / Monocrystalline SiC

High-Temperature Industrial Furnaces

Optical Fiber Drawing

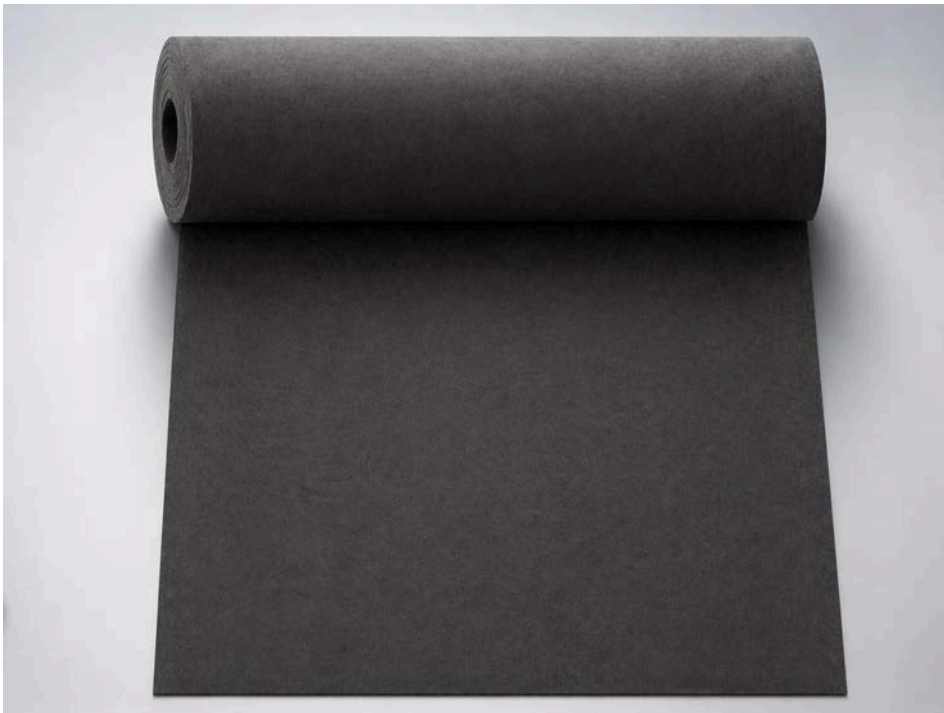
Rigid-Felt Precursor

03 PARAMETERS

PHYSICAL PROPERTIES / TYPICAL VALUES

Product Parameters – Soft Felt

Item	Unit	Graphitized	Purified	
Processing Temp	°C	2000-2200	2200	
Carbon Content	%	≥99	≥99.99	
Ash Content	ppm	≤500	≤20	
Bulk Density	g/cm ³	0.08 ~ 0.13		
Thermal Conductivity	700°C	W/(m·K)	0.04	0.02
	900°C	W/(m·K)	0.061	0.039
	1300°C	W/(m·K)	0.02-0.08	0.03-0.08
	1500°C	W/(m·K)	0.133	0.198
Compressive Strength	MPa	0.10 ~ 0.16	0.10 ~ 0.16	
Thickness	mm	5/10		
Width	mm	1100-1400		
Length	m	Thickness of 10mm: 20-30m; Thickness of 5mm: 40-50m;		



The data provided is accurate and reliable but does not serve as guaranteed values for specific applications. Products should be used under the professional guidance of AYD.