AUWIN SUPERFLEX MICRO-NANO CERAMIC FIBER PAPER

AUWIN Ceramic Base specializes in the production of high-quality high-temperature insulation products, striving to help our customers save energy, enhance fire safety, and create a more comfortable environment. Leveraging our extensive experience in passive fire protection materials for automotive and aerospace applications, as well as our exceptional R&D and manufacturing capabilities, the AUWIN team has developed SUPERFLEX micro-nano ceramic paper—a flexible insulation material. This functional material is an inorganic composite of specialty ceramic fibers and microporous nanomaterials, designed to meet applications requiring both thermal insulation and flexibility.

Based on the specific fire resistance and insulation properties desired by customers, the AUWIN team can composite the micro-nano ceramic paper with materials such as PE/PET, mica, and others to provide tailored solutions.

Main Product Types

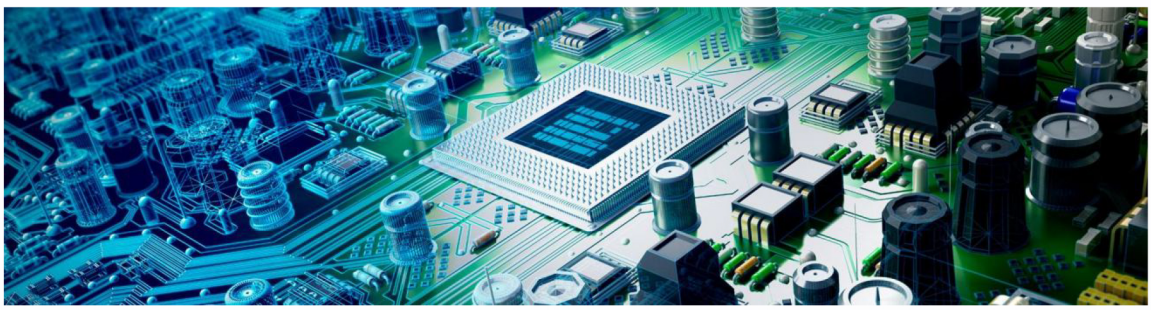
- Micro-nano Ceramic Paper
- Mica-laminated Micro-nano Ceramic Paper
- PE/PET-laminated Micro-nano Ceramic Paper

Key Application Industries

- New Energy Batteries
- Electronics Industry
- Aircraft and Aerospace
- Precision Instruments

Key Characteristics

- Excellent thermal insulation
- Lightweight
- Flexible
- Electrical insulation



More details about the products and applications, pls contact sales@fire-insulations.com

安翼陶基 AUWIN CMC

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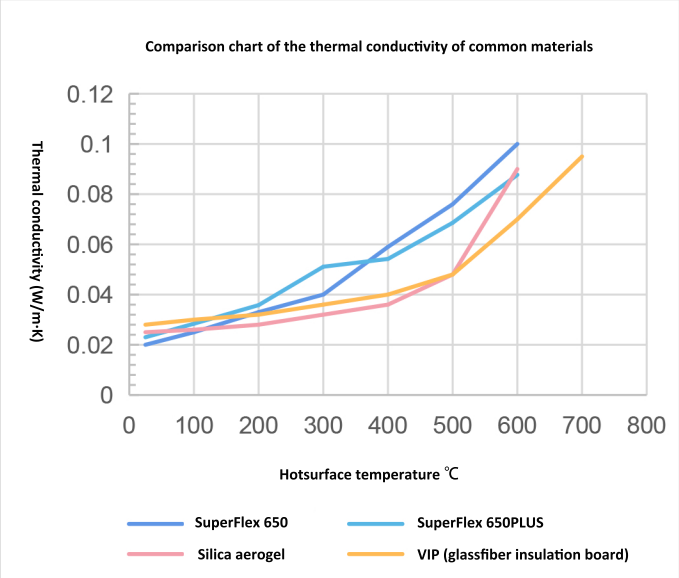
Key Technical Specifications

- Maximum service temperature: up to 650°C
- Ultra-low thermal conductivity: <0.025 W/(m·K) at 100°C
- Low specific heat capacity, minimal heat storage, excellent thermal shock resistance
- Class A fire protection, asbestos-free and formaldehyde-free
- Optional insulation or waterproof coatings
- In thermal runaway scenarios, the PLUS variant undergoes phase change with heat absorption functionality.
- Unlike traditional aerogel production, which consumes large amounts of solvents and generates chemical waste—posing environmental risks if mishandled—AUWIN's micro-nano ceramic paper is manufactured with no adverse environmental impact.



DATA SHEET

Product Name	SuperFlex 650	SuperFlex 650plus
Classify temperature	650℃	650℃
Long-term working temperature	600℃	600℃
Color	White	White
Density (kg/m3)	200-250	300-350
Tensile Strength （PSI）	80	
Thermal Conductivity	Average Thermal Conductivity W/(m·K)	
25℃	0.020	0.023
100℃	0.025	0.028
300℃	0.042	0.054
500℃	0.080	0.070
Standard thickness	0.5-6mm	
Standard width	610mm, 1220mm	

Remarks: The above data are representative average values obtained based on common testing methods and are provided as technical service content.
If you have any questions about product technical issues, please contact our technical Department.

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