

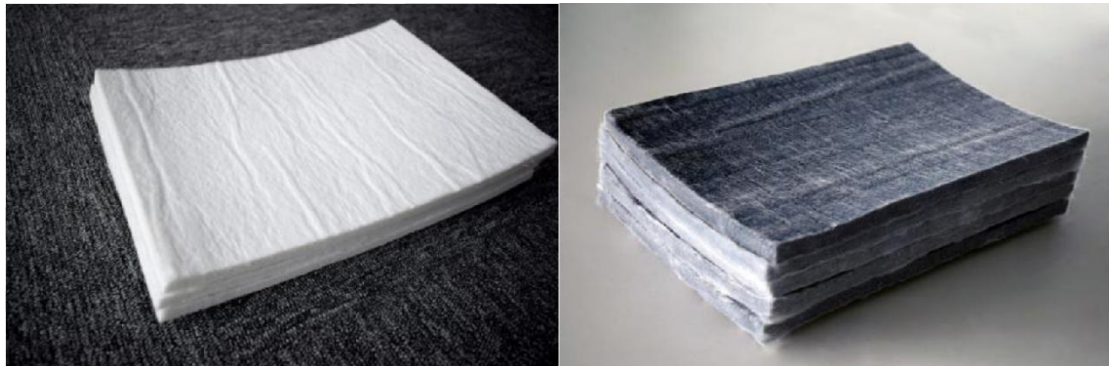
AG-F Aerogel Insulation Mat

➤ Product Introduction:

The AG-F[®] series aerogel insulation mat delivers optimal thermal performance and energy-saving benefits at temperatures up to 650°C. Crafted from specialized fiber strands through a nano-composite process, This material boasts an ultra-low thermal conductivity coefficient and is 75% thinner than comparable products. This enables faster and easier installation in confined spaces or areas prone to mechanical impact, saving both time and costs. It is the ideal thermal insulation material for industrial pipeline insulation, tank insulation, automotive fireproofing and heat shielding, and building insulation applications.

➤ Product Characteristics:

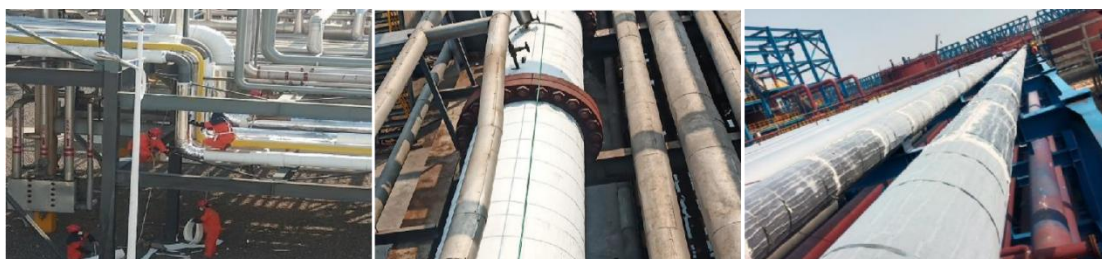
- (1) Low thermal conductivity, superior thermal insulation performance, effectively reducing heat loss and saving energy.
- (2) Thin profile with excellent flexibility, maximizing space utilization.
- (3) Fire-resistant, water-repellent properties, and long service life, effectively reducing material costs.
- (4) Easy to cut and install, simplifying construction and saving labor costs.
- (5) Safe and environmentally friendly, free of chlorine ions, significantly preventing corrosion under insulation (CUI).



➤ Product Applications:

- (1) Prefabricated insulated pipes.

- (2) Insulation for storage tanks, vessels, and other equipment.
- (3) Steam pipelines for petroleum extraction.
- (4) Pipelines in thermal power plants, petrochemical plants, and chemical plants.
- (5) Insulation for high-speed trains, subways, and other vehicle bodies.
- (6) Fireproofing and thermal insulation for buildings and new energy vehicles.



➤ **Technical Parameters:**

Product Model	AG-F [®] 300、AG-F [®] 450、AG-F [®] 650			Inspection Standards
Product Specifications	Thickness	mm	5/10/15 (Customizable)	GB/T 34336
	Wide	mm	1500	
	Appearance	/	in rolls, in sheets	
	Color	/	White/Gray-blue	
Performance Parameters	Thermal conductivity	W/(m·K)	0.020 (25°C)	GB/T 10294
			0.036 (300°C)	
	Maximum operating temperature	°C	≤650	GB/T 19587
	Density	kg/m ³	160~240	GB/T 34336
	Water repellency	%	99.9	GB/T 10299
	Volume moisture absorption rate	%	≤5.0	GB/T 5480

	Tensile strength	kPa	1409 (horizontal)	GB/T 17911
			366 (vertical)	
	Permanent change rate of heating line	%	-0.3	GB/T 17911
	Compression rebound rate	%	96	GB/T 13480
	Fire performance rating	/	A	GB/T 8624
	Surface properties	/	Overall hydrophobicity	GB/T 30693
Others	We can apply anti-powdering coating per customer requirements, cut to specified dimensions as requested, and provide application consulting and construction process guidance tailored to the customer's operating conditions.			

Note: Product quality complies with GB/T 34336-2017 "Nano-Pore Aerogel Composite Thermal Insulation Products" standard, Type III, Class A.

➤ **Precautions:**

Safety Protection Specifications: Dust generation is unavoidable during material transportation and construction use. It is recommended to install exhaust ventilation equipment in areas prone to dust generation. Construction personnel must wear protective equipment such as dust masks, gloves, and safety goggles throughout the process to avoid direct contact with skin and eyes.

Construction and Installation: For further information and support, contact the Technical Department Engineering Services.

Transportation and Storage: Transportation vehicles must be equipped with dry, rainproof measures. Handle materials gently during loading, unloading, and transport to prevent crushing. Store in a dry, well-ventilated, rainproof location away from fire sources, heat sources, and chemical solvents. Stack materials separately by type and specification to avoid crushing.

Note: The product technical information and related data described above are test values obtained from our company's experiments. They are for reference only and do not constitute legal interpretations or guarantees. Before use, please test and confirm according to your company's required working conditions.