



TECHNICAL DATA

Product name: Aerogel Insulation Felt AG-BRF650 and Felt AG-BRF950 (original product name: AG-F650 and AG-F950, respectively)

Current version: 1.0.1, issued: 15.05.2023 Replaced version: 1.0.0, issued: 22.02.2023

Product description

Brief description	Aerogel hot insulation felt AG-BRF650 and AG-BRF950 can provide the best insulation performance and energy saving effect up to +650°C and +950°C, respectively.
Colour	White/Gray
Product features	<ol style="list-style-type: none">(1) Extra low thermal conductivity, good insulating property, reducing heat loss and energy consumption effectively.(2) Extra thin thickness, good flexibility, improving space utilization.(3) Excellent fireproof and hydrophobic performance, long service life and material cost saving.(4) Easy cutting and installation, construction cost saving.(5) Safety and environment friendly, do not contain any chloride ions, which greatly avoiding corrosion under the insulation layer (CUI).
Applications	<ol style="list-style-type: none">(1) Prefabricated insulation piping(2) Storage tanks / vessels insulation(3) Oil production steam pipeline(4) Insulation of pipelines in power plant, petrochemical plant and chemical plant(5) Insulation of high-speed train and subway(6) Fire protection and insulation of buildings and new energy vehicles

Technical parameters

Product Model	AG-BRF650 Grade S Aerogel felt	Standard/Test method
The exterior	Soft roll , White/Gray	
Thickness	5mm, 10mm or customized	GB/T 34336-2017
Width	1500mm	
Thermal Conductivity	$\leq 0.017 \text{ W}/(\text{m}\cdot\text{k})$ at 25°C	GB/T 10294-2008
Bulk density	200kg/m ³	GB/T 34336-2017
Hydrophobicity	99.5%	GB/T 10299-2011
Volume water absorption	0.20% (25mm, 2h)	GB/T 5480-2017
Combustion level	Class A	GB 8624-2012
Compressive strength	35kPa at 10%	GB/T 13480-2014
Compression rebound rate	99%	GB/T 34336-2017
Vibration mass loss	$\leq 0.5\%$	
Maximum operating temperature	650°C	GB/T 17430-2015
Linear Shrinkage	< 1% at 650°C	GB/T 17911-2018
Service life	> 20 years	
Package	Wrapped by plastic film or customized	

Product Model	AG-BRF650 Grade A Aerogel felt	Standard/Test method
The exterior	Soft roll , White/Gray	
Thickness	5mm, 10mm, 20mm or customized	GB/T 34336-2017
Width	1500mm	
Thermal Conductivity	$\leq 0.021 \text{ W}/(\text{m}\cdot\text{k})$ at 25°C $\leq 0.022 \text{ W}/(\text{m}\cdot\text{k})$ at 100°C $\leq 0.027 \text{ W}/(\text{m}\cdot\text{k})$ at 200°C $\leq 0.036 \text{ W}/(\text{m}\cdot\text{k})$ at 300°C $\leq 0.050 \text{ W}/(\text{m}\cdot\text{k})$ at 400°C $\leq 0.060 \text{ W}/(\text{m}\cdot\text{k})$ at 500°C	GB/T 10294-2008
Bulk density	200kg/m ³	GB/T 34336-2017
Hydrophobicity	99.5%	GB/T 10299-2011
Volume water absorption	0.24% (25mm, 2h)	GB/T 5480-2017
Combustion level	Class A	GB 8624-2012
Compressive strength	120kPa at 25%	GB/T 13480-2014
Compression rebound rate	99%	GB/T 34336-2017
Vibration mass loss	$\leq 0.5\%$	

Product name: Aerogel Insulation Felt AG-BRF650 and AG-BRF950 (original product name: AG-F650 and AG-F950, respectively) issued: 15.05.2023

Maximum operating temperature	650°C	GB/T 17430-2015
Linear Shrinkage	< 1% at 650°C	GB/T 17911-2018
Service life	> 20 years	
Package	Wrapped by plastic film or customized	

Product Model	AG-BRF950 Grade A Aerogel felt	Standard/Test method
The exterior	Soft roll , White/Gray	
Thickness	10mm or customized	GB/T 34336-2017
Width	1500mm	
Thermal Conductivity	$\leq 0.021W (m \cdot k)$ at 25°C $\leq 0.022W (m \cdot k)$ at 100°C $\leq 0.027W (m \cdot k)$ at 200°C $\leq 0.036W (m \cdot k)$ at 300°C $\leq 0.050W (m \cdot k)$ at 400°C $\leq 0.060W (m \cdot k)$ at 500°C	GB/T 10294-2008
Bulk density	200kg/m ³	GB/T 34336-2017
Hydrophobicity	99.5%	GB/T 10299-2011
Combustion level	Class A	GB 8624-2012
Compressive strength	120kPa at 25%	GB/T 13480-2014
Compression rebound rate	99%	GB/T 34336-2017
Vibration mass loss	$\leq 1\%$	
Maximum operating temperature	950°C	GB/T 17430-2015
Linear Shrinkage	< 1% at 950°C	GB/T 17911-2018
Service life	> 20 years	
Package	Wrapped by plastic film or customized	

Note: Product quality is implemented according to GB/T 34336-2017 "Reinforced nanoporous aerogel products for thermal insulation" standard Type III Category S and Type I Category A.

Burning behavior conforms to the requirement of Class A defined in GB 6824-2012 "Classification for burning behavior of building materials and products" .

Precautions

Safety protection specification:

Dust will inevitably appear in the process of material transportation and construction. It is recommended to install exhaust equipment in places where dust is easy to occur. Construction personnel should wear dust masks, gloves, goggles and other protective facilities throughout the process to avoid direct contact with skin and eyes.

Transportation and storage:

The means of transportation shall be provided with dry and rainproof measures, and shall be handled with care to avoid heavy pressure. It should be stored in dry, ventilated, rainproof, far away from fire, heat source and chemical solvent, and stacked separately according to varieties and specifications to avoid heavy pressure.

Construction and installation:

For industrial application, it is recommended to refer to the construction instruction manual of the manufacturer. For more information and support, please contact the engineering service of technical department.

Note: the product technical information and relevant data mentioned in the above data are the experimental test values of the manufacturer, which are only for reference, not as legal interpretation and guarantee. Please use them after testing and confirmation according to the working conditions required by your company before use.