Insulation 1

TECHNICAL DATA

Product name: Silica Aerogel Powder AG-BRDC

Current version: 1.0.1, issued: 23.05.2023 **Replaced version: 1.0.0, issued: 22.02.2023**

Product description

Brief description	AG-BRDC aerogel powder refers to the SiO_2 aerogel powder product with nano-pore structure.
Material type	Aerogel powder
Colour	White
Product features	(1) Excellent thermal insulation performance: the thermal conductivity at room temperature (25°C) is less than 0.018W/m·K. (2) High hydrophobicity: the hydrophobic effect of lotus leaf, the hydrophobicity rate is ≧90%. (3) Very low density: light in weight and porosity as high as 90% or more. (4) Green environmental protection: The product is composed of inorganic materials, does not contain harmful substances to the human body, and is safe and reliable. (5) Durable heat resistance: The unique nano three-dimensional network structure provides excellent thermal stability, without problems of reduced thermal insulating performance caused by long-term use of traditional insulating materials. (6) Strong adsorption: Aerogel powder has high surface area and excellent adsorption performance.
Product range	Particle size of 15 or 50 μm
Applications	(1) It is suitable for the manufacture of water-based aerogel thermal insulation coatings and water-based aerogel pastes. (2) Polyester chips and functional polyester films. (3) Thermal insulation foam sheet filler. (4) Purification and adsorption functional packing. (5) Nano-oil flooding agent is "strongly hydrophobic and strong lipophilic", repelling water and affinity to oil. (6) Reduce the density of composite materials and improve the thermal insulation, fire resistance and impact resistance of composite materials.

Technical parameters

Property	Value/Assessment	Standard/Test method
Thermal Conductivity [W/（m·K）]	≤0.018（25℃）	ISO 22007-2
Specific Surface Area [㎡/g]	600～800	GB/T 19587
Tap Density [kg/m³]	30～50	
Particle Size [μm]	15、50	GB/T 19077
Aperture Size [nm]	20～50	Nitrogen adsorption and desorption
Porosity Rate [%]	90～95	Skeletal Density Inversion Method
Surface Properties	Hydrophobic	GB/T 30693
Package	AG-DC15 (10KG/bag, 4KG/carton) AG-DC50 (10KG/bag, 5KG/carton)	

Precautions

Safety protection specifications: aerogel products are environmentally friendly, safe and harmless. However, dust will inevitably appear during transportation and construction. It is recommended to install exhaust equipment in places where dust is likely to be generated. Construction workers wear protective equipment such as dust masks, gloves, and goggles throughout the process to avoid direct contact with skin and eyes.

Transportation and storage: The means of transport should be dry and rain-proof, and should be handled with care to avoid heavy pressure during handling and transportation. It should be stored in a dry, ventilated, rain-proof, away from fire source, heat source and chemical solvent conditions, and should be stacked according to varieties and specifications to avoid heavy pressure.

Note: The product technical information and related data described in the above materials are the experimental test values of our company, which are for reference only, not as legal interpretation and guarantee. Before use, please use it after testing and confirmation according to the working conditions required by your company.