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HEY-AG-S Aerogel Slurry

➢ Product Introduction:

HEY-AG-S aerogel slurry is a high-performance thermal insulation slurry primarily composed of high-performance SiO_2 aerogel. Utilizing a proprietary special process, hydrophobic SiO_2 aerogel particles are dispersed in an aqueous medium. This product perfectly resolves dust issues associated with aerogel during use and transportation while maximally preserving the aerogel structure. The dried coating of this slurry achieves a thermal conductivity as low as 0.018 W/(m·K) at room temperature, with a dry slurry density as low as 60 kg/m^3. After drying, the water-based aerogel slurry exhibits hydrophobic properties. Aerogel slurry serves as an ideal additive for lightweight, high-efficiency thermal insulation and waterproofing materials, delivering exceptional performance particularly in water-based thermal insulation coatings and other composite insulation materials.

➢ Product Characteristics:

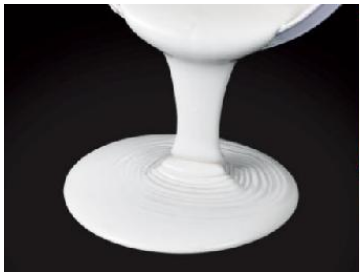
(1) Coating additives, particularly suitable for extensive use in water-based thermal insulation coating systems.

(2) Coating raw materials, directly used as ingredients to produce high-efficiency thermal insulation coatings.

(3) Building materials, composite insulation materials incorporating perlite, rock wool, fiberglass, and similar materials.

(4) Thermal insulation for the paper manufacturing industry.

(5) Ultra-thin insulation materials for thermal protection in new energy vehicles and specialized components within electronic devices.



➢ Transportation and Storage:

Transportation and Storage: The product should be transported using standard methods, protected from rain and direct sunlight during transit. When storing the product, maintain sealed packaging in a dry, well-ventilated area away from direct sunlight. Storage temperature should be maintained between 5ºC and 35ºC.

➢ Technical Parameters:

Product Model	**HEY-AG-S**		
Product Specifications	Packaging	/	Bulk
	Color	/	White
	Appearance	/	White viscous emulsion or paste
Performance Parameters	Thermal conductivity after drying	W/(m • K)	≤0.018~0.022 (25ºC)
	Density	kg/m^3	200~300 (wet pulp)
			60~100 (dry pulp)
	Particle size	μm	15、50
	Aerogel solid content	%	10~15
	Temperature range	ºC	＜200
	Shelf life	/	6 months

➢ Operational Precautions:

(1) Before use, the presence of separated liquid at the bottom of the slurry is normal. Simply stir thoroughly before application.

(2) Customers may adjust the viscosity by utilizing the liquid at the bottom of the slurry or adding up to 50% water.

(3) If external factors cause the slurry to become dry or highly viscous, dust generation during

operation is normal.

(4) If dust occurs during operation, customers may first use the liquid at the bottom of the slurry or add no more than 50% water to cover and moisten the slurry surface. Then slowly stir to form a wet slurry before finally high-speed stirring for use.

(5) After use, the slurry must be stored sealed and protected from light in an environment below 28°C。

(6) For paste exceeding its shelf life: - If in wet paste state: Add no more than 50% water or our company's specialized agent to moisten the surface. Slowly stir to form a paste, then high-speed mix until uniform. Performance remains unaffected. - If solidified into dry lumps: Contact our technical personnel. Follow our company's guidance for processing before use.

(7) We recommend customers add a small amount of water and stir the slurry once every month. This practice extends the slurry's shelf life to over 6 months. Water addition volume can be adjusted based on the slurry's condition.

(8) This slurry is suitable for use in alkaline or acidic environments but should not be mixed in large quantities with organic solvents.

(9) The recommended addition rate for aerogel slurry is 35%~70%, with 40% being optimal.

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.*