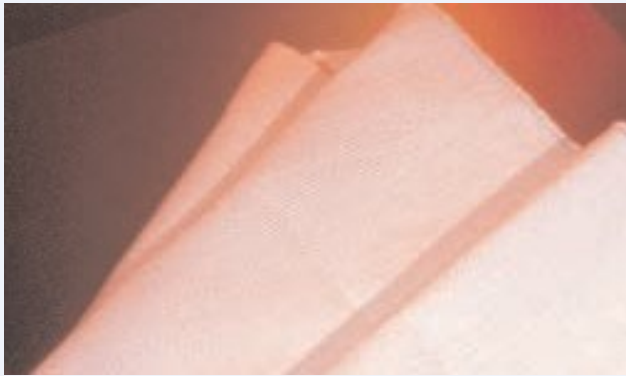


Kao-Tex™ 2200 and 2500 Textile Cloth

Datasheet Code US: 514-955

© 2015 Thermal Ceramics is a business of Morgan Advanced Materials



Features

- High temperature use up to 2500°F
- Excellent for use in fabrication
- Excellent thermal and mechanical properties
- Electrical properties
- Abrasive resistance
- Non-hygroscopic
- Asbestos free
- Low shrinkage
- Fire and flame resistant

Product Description

Kao-Tex styles 2200 and 2500 cloths are woven from continuous filament fibers. These fibers are a polycrystalline metal oxide that provides strength and flexibility far superior to glass, asbestos, quartz, or amorphous silica textiles at or near their service temperatures.

Specially designed fibers provide low thermal conductivity with excellent thermal shock resistance to continuous temperatures up to 2500°F. These ceramic fiber textiles have superior strength, good abrasion resistance, and integrity, allowing them to withstand combined temperatures while retaining dimensional stability.

Fabricated with other Thermal Ceramics fiber insulating products enables custom-engineered thermal systems to customer specifications. Each can be designed for folding, wrapping, and generally conforming to a limitless variety of shapes and sizes.

Applications

- Tube seals
- Furnace zone dividers
- Furnace curtains
- Gaskets and seals
- Expansion joints
- Tube wraps
- Filtration media
- Splash guards

Treatments Available

- Heat Cleaning - a controlled process that is used to remove any organic coatings from the surface of fibers.
- Heat Treating - a higher temperature process which changes the crystal structure of the fiber. This treatment improves the chemical resistance, anneals stress from the fiber, and increases stiffness of the material. Certificates of Conformance are available upon request.*

Chemical Properties

Fibers are coated with all sizes consisting of organic polymers and can ignite/decompose to hazardous by-products when first heated. If exposure to 100% relative humidity for a 10-day period, heat treatment is necessary.

*Note: Kao-Tex 2500 cloth is not available for heat treating.

Kao-Tex™ 2200 and 2500 Textile Cloth

Physical Properties							
		Kao-Tex 2200			Kao-Tex 2500		
Continuous use limit (°F)		2200			2500		
Melting temperature (°F)		3272			3272		
Fiber diameter (mm)		10			12		
Specific heat (BTU/lb/°F)		0.32			0.32		
Dielectric constant @ GHz		5.2			5.7		
Chemical Analysis, %							
Alumina, Al ₂ O ₃		62			70		
Silica, SiO ₂		24			28		
Boron oxide, B ₂ O ₃		14			2		
Lime + Magnesia, CaO + MgO		trace			trace		
Availability							
Style	Weight (oz/yd ²)	Width (in)	Thickness (in)	Air Permeability (ft ³ /min/ft ²)	Weave	Breaking Strength: Warp (lb/in)	Breaking Strength: Fill (lb/in)
Kao-Tex 2200							
AF-14	9.0	38	0.014	30	Plain	150	135
AF-30	17.3	36	0.030	50	Crowfoot satin	200	180
AF-40	24.0	36	0.037	35	5 harness satin	300	190
AF-62	29.5	4, 12, 30	0.054	100	Plain double layer	260	190
Kao-Tex 2500							
BF-20	14.9	36	0.020	15	5 harness satin	250	220
BF-30	20.4	36	0.030	35	Crowfoot satin	290	260