



Product Technical Data Sheet

## CeraTex™ High Temperature Ceramic Fiber Textiles

### Product Description:

CeraTex Ceramic Fiber is alumino-silicate based refractory fiber, white and odorless. With reinforcement carrier (usually high temperature fiberglass and wire), the fiber is made into industrial textile products.

### Main Characteristics:

CeraTex products have lightweight, very low thermal conductivity and excellent insulation values at temperature up to 2300°F. It also resists corrosive chemicals, commonly used acid and alkali (exceptions are hydrofluoric, phosphoric acids and concentrated alkalis). The fiber is abrasion-resistant (relatively abrasive to other materials as well), and can be used in tough environment. CeraTex is a good substitute of asbestos products in many insulation and sealing applications.

The products contain certain amount of organic binder materials(for weaving purpose only). In an application, initially the organic binder will burn at lower temperature and generate smokes. After the organic binder is burned out, the product will turn white again. In applications where smoke is prohibited, the product should be heat treated first before it is put into use.

### Chemical and Physical Data:

Chemical Composition (refractory fiber only):

Total Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> >97% ( Al<sub>2</sub>O<sub>3</sub>: 47%); Fe<sub>2</sub>O<sub>3</sub>: < 1.1%

Physical Properties:

Weight Loss(1800°F) 8-10%; Refractory fiber content > 85%

Fiber Diameter: 2 - 4 microns; Fiber Length: 100 - 250 mm

Fiber Shrinkage (1800°F, 3h): < 3.5%

Working Temperature : 1,800 °F. for Continuous Use; 2300 °F Maximum



**Thermal Conductivity:**

570°F	0.84 BTU/sq.ft. °F/in	(0.12 W/m °K)
1,100 °F	0.91 BTU/sq.ft. °F/in	(0.13 W/m °K)
1,800 °F	1.19 BTU/sq.ft. °F/in	(0.17 W/m °K)

**Product Styles:**

**3100 Yarn:** 2-ply; 3-ply, 525 Tex each ply

**3110 Cloth:** Standard Size: 39.4" x 33 Yard (1m x 30m)

<u>3110W</u>	with Fiber Glass and Inconel Wire Insert,	1/16"(.080") thick,	33 oz
		1/8"(.120") thick,	43 oz
<u>3110G</u>	with Fiber Glass Insert (No wire),	1/16"(.080") thick,	30 oz
		1/8"(.120") thick,	41 oz

**3120 Tape:** Tape Standard Width: 1", 2", 3", 4"; Standard Length: 100' (30 m)

<u>3120W</u>	with Fiber Glass and Inconel Wire Insert,	Thickness 1/16"(.080"), 1/8"(.120")
<u>3120G</u>	with Fiber Glass Insert (No wire),	Thickness 1/16"(.080"), 1/8"(.120")

**3130 Twisted Rope:** 3-strand roving twisted rope.

Sizes: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4", 1-1/2", 2", 3"

**3140 Square Braid:** Square Braided Packing Rope

Sizes: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4", 1-1/2", 2", 3"

**3150 Round Braid:** Round Braided Packing Rope

Sizes: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4", 1-1/2", 2", 3"

**3160 Sleeving (Tube):** Wall thickness: 1/16" (.080"); 1/8" (.120")

Standard size: 1/2", 5/8", 3/4", 7/8", 1", 1-1/4", 1-1/2"

**Product Handling and Safety Information**

Protective gloves, clothing and mask are recommended for product handling. Airborne fiber dust should always be kept down. Ceramic fiber may cause itching and irritation to skin and eyes by contact. If inhaled in sufficient amount of ceramic fiber, it may cause irritation to respiratory tract, scratchiness of the nose or throat, cough or chest discomfort. Ceramic fiber is classified in Group 2b (possible human carcinogen) by IARC. Based on animal study, it is a possible cancer hazard by prolonged heavy inhalation of this fiber. For detailed information, please refer to our MSDS. *(In animal studies, long-term laboratory exposure to doses hundreds of times higher than normal occupational exposures has produced fibrosis, lung cancer, and mesothelioma in rats or hamster., The fibers used in those studies were specially sized to maximize rodent respirability.)*

The information and statements herein are based on our best knowledge, but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake their own verification and testing to determine the suitability for their own particular purpose of any information referred to herein.