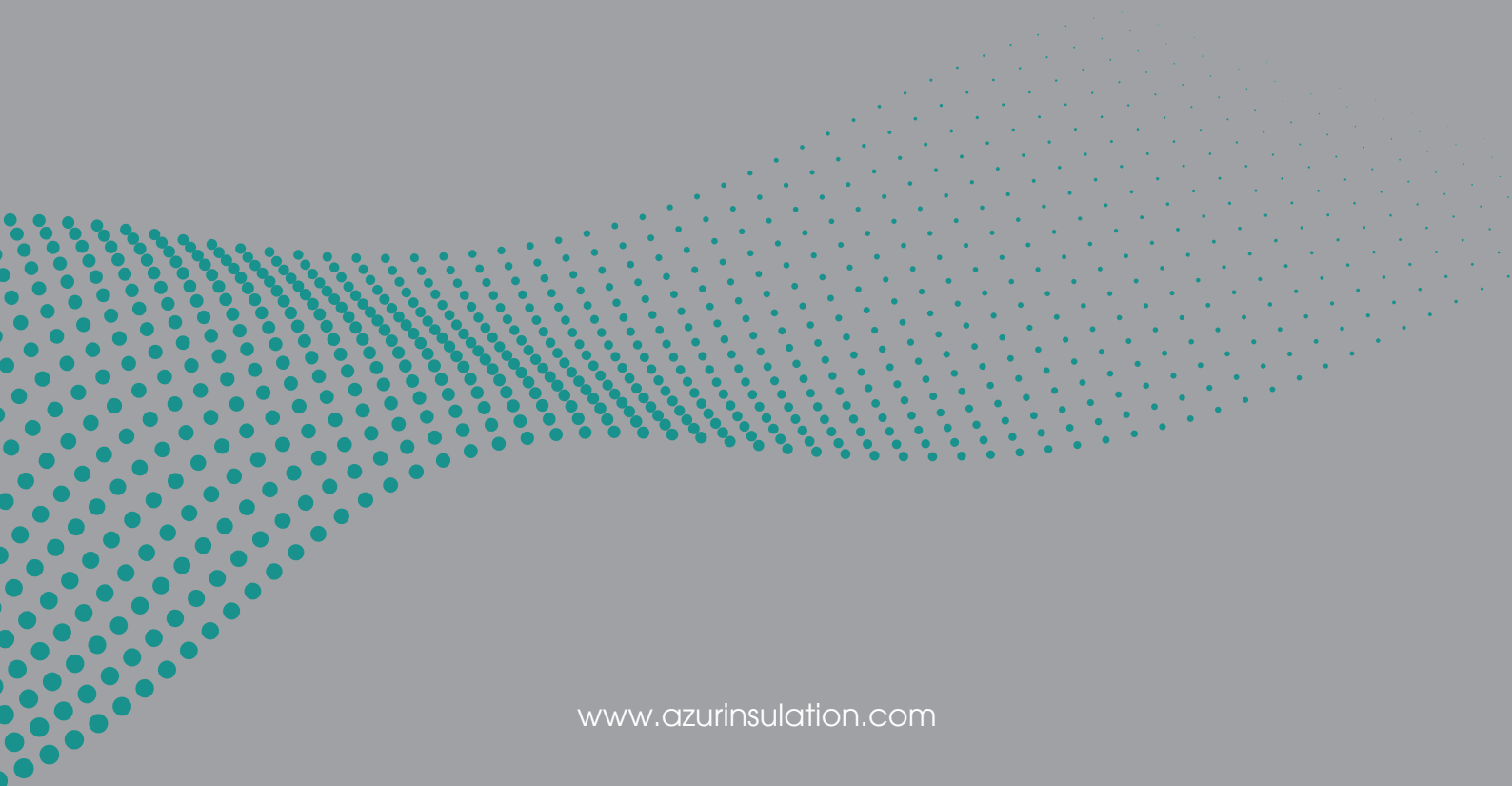




**AZUR** INSULATION  
*Smart Supply*

## Ceramic Fiber



Ceramic Fiber is a thermal and fire proofing material includes long, flexible, and interwoven spun fibers produced for appliances operating at 650-1430°C. Ceramic fiber is obtained by mixing the raw materials of aluminum, silica and zirconium homogeneously, melting them at high temperatures, and beating the melt against disks rotating at high speed to create fibers.

Ceramic Fiber is used in the insulation of industrial ovens, boiler tubes and flues, and technical appliances, which operate at very high temperatures.

Ceramic Fiber is vapor and chemical resistant (with the exception of phosphoric and hydrofluoric acid, and strong alkaline materials, such as Na<sub>2</sub>O and K<sub>2</sub>O). It maintains its thermal insulation properties and characteristics despite continuous wetting and drying.

## CERAMIC FIBER BLANKET

Silica and alumina are melted into fibers at high temperatures and applied with pressure to create Ceramic Fiber blankets of various thickness and density levels.



### Product Features

- High tensile strength and high elasticity
- Low thermal conductivity level
- High thermal resistance level
- Good level of sound insulation
- Can be stored at low temperatures
- Minimum shrinkage at high temperatures
- Thermal shock resistant

### Areas of Use

- Industrial oven insulation
- Ceramics and glass industry
- Iron and steel industry
- Casting industry
- Cement industry
- Industrial oven insulation
- Steel/fire doors



# Ceramic Fiber Blanket 1260 °C

## Areas of Usage:

- Furnace, kiln, reformer and boiler linings
- Investment casting mold wrappings
- Removable insulating blankets for stress relieving welds
- Reusable insulation for steam and gas turbines
- Flexible high-temperature pipe insulation
- Pressure and cryogenic vessel fire protection
- High-temperature kiln and furnace insulation
- Furnace door linings and seals
- Soaking pit seals •
- Furnace repairs
- Thermal reactor insulation
- Expansion joint seals
- Primary reformer header insulation •
- High-temperature gasketing
- Glass furnace crown insulation
- Incineration equipment and stack linings
- Annealing cover seals
- High-temperature filtration
- Nuclear insulation applications
- Atmosphere furnace lining
- Field steam generator lining
- Chemical process heaters

## Chemical Composition (Weight / %)

SiO <sub>2</sub>	52-54
Al <sub>2</sub> O <sub>3</sub>	43-45
MgO+CaO	0-5-1
Na+K	≤ 0,3
Fe <sub>2</sub> O <sub>3</sub>	≤0,25

## Physical Properties

Colour	White		
Classification temperature( C° )	1260 C°		
Shot Content %	≤ 1		
Fiber diameter(micron)	3-3,5		
Usage temperature( C° )	1200 C°		
Linear Shrinkage After Heating(%)	1260 C° 24 hour/≤2,5		
Density (kg/m <sup>3</sup> )	110-128	96-128	96-128
Tensile Strength( MPa )	0,08	0,1	0,1
Thickness (mm)	13	25	50
Length (mm)	14400	7200	3600
Width (mm)	610		

## Thermal Conductivity (W/mK) / Thermal Resistance (m<sup>2</sup>K/W)

Density (kg/m <sup>3</sup> )	110		96		96	
	(W/mK)	(m <sup>2</sup> K/W)	(W/mK)	(m <sup>2</sup> K/W)	(W/mK)	(m <sup>2</sup> K/W)
C°						
400 C°	0,09	0,14	0,09	0,28	0,09	0,56
600 C°	0,15	0,09	0,15	0,17	0,15	0,33
800 C°	0,22	0,06	0,22	0,11	0,22	0,23
Density (kg/m <sup>3</sup> )	128					
400 C°	0,09	0,14	0,09	0,28	0,09	0,56
600 C°	0,119	0,11	0,119	0,21	0,119	0,42
800 C°	0,152	0,09	0,152	0,16	0,152	0,33

## STORAGE

Product packages should be placed on at least one pallet which should not be in direct contact with the ground at storage area.

Product packages should be protected from water, moisture and sunlight in the storage area.

Appropriate work safety clothing and equipment must be used to protect the skin, eye and upper respiratory system during transport.

Products must be covered with a tarpaulin when shipped.

Do not leave any material on the products in such a way as to damage the package and the product.

Palletized products should not be stacked and stored on top of each other.

The opened packages must not be disposed of and must be disposed of in accordance with the regulations.

## Ceramic Fiber Blanket 1430 °C ZIRC

### Areas of Usage:

- Ceramic kilns (abrasives, sanitary ware, electrical insulators, etc.)
- Billet/slab reheat furnaces
- Seals, gaskets, batten strips
- Forge furnaces
- Refractory kilns
- BOF door/shields
- Soaking pit seals
- High-temperature kilns and furnaces
- Boiler linings
- Furnace door linings and seals
- Glass furnace crown insulation
- Incineration equipment
- Skid pipe insulation
- Chemical process heaters
- Reformers

### Chemical Composition (Weight / %)

SiO <sub>2</sub>	45-47
Al <sub>2</sub> O <sub>3</sub>	25-28
ZrO <sub>2</sub>	20-24
Na+K	≤ 0,3
Fe <sub>2</sub> O <sub>3</sub>	≤0,25

### Physical Properties

Colour	White		
Classification temperature( C° )	1430 C°		
Shot Content %	≤ 1		
Fiber diameter(micron)	3-3,5		
Usage temperature( C° )	1350 C°		
Linear Shrinkage After Heating(%)	1350 C °24 hour/≤2,5		
Density (kg/m <sup>3</sup> )	110-128	96-128	96-128
Tensile Strength( MPa )	90	100	100
Thickness (mm)	13	25	50
Length (mm)	14400	7200	3600
Width (mm)	610		

### Thermal Conductivity (W/mK) / Thermal Resistance (m<sup>2</sup>K/W)

Density (kg/m <sup>3</sup> )	110		96		96	
	(W/mK)	(m <sup>2</sup> K/W)	(W/mK)	(m <sup>2</sup> K/W)	(W/mK)	(m <sup>2</sup> K/W)
400 C°	0,25	0,05	0,25	0,10	0,25	0,20
600 C°	0,34	0,04	0,34	0,07	0,34	0,15
800 C°	0,44	0,03	0,44	0,06	0,44	0,11
Density (kg/m <sup>3</sup> )	128					
400 C°	0,18	0,07	0,18	0,14	0,18	0,28
600 C°	0,28	0,05	0,28	0,09	0,28	0,18
800 C°	0,36	0,04	0,36	0,07	0,36	0,14

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