

## CCEWOOL Bio Soluble Fiber Blanket



Temperature Grade: 1200°C (2192°F), 1300°C (2372°F)

CCEWOOL Bio Soluble (Low Biopersistent) Fiber Blanket is made from alkaline earth silicate and is a calcium-magnesium insulating fiber. It is referred to as a soluble fiber because it has some solubility in bodily fluids. The introduction of MgO and CaO in soluble fibers enhances their flexibility, elasticity, and provides excellent thermal and mechanical performance.

### Characteristics:

- Excellent chemical stability;
- Excellent thermal stability;
- Excellent tensile strength;
- Low thermal conductivity;
- Low heat capacity;
- Excellent insulation properties;
- Good sound insulation.

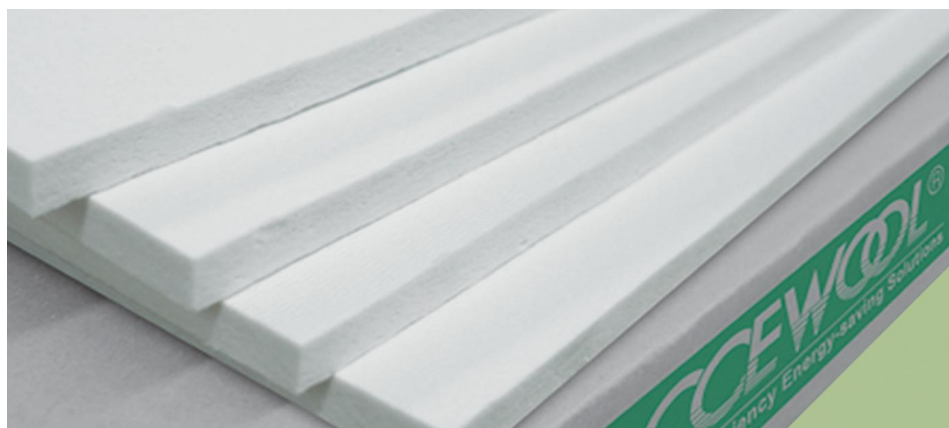
### Application:

- Industrial furnace wall lining;
- Back lining material;
- Furnace masonry expansion joints, door, roof heat insulation seal;
- High temperature pipe insulation material;
- Module / folded module processing material;
- Fireproof coating.

**TDS**

<b>CCEWOOL Bio Soluble Fiber Blanket</b>				
Classification Temperature	1200°C (2192°F)		1300°C (2372°F)	
Chemical Composition (%)				
SiO <sub>2</sub>	62-68		≥70	
CaO	26-32		-	
MgO	4-7		-	
CaO+MgO	-		≥20	
Color	Light Bluish		Light Bluish	
Shot Content (%)	≤12		≤12	
Density (kg/m <sup>3</sup> )	96(6lb/ft <sup>3</sup> )	128(8lb/ft <sup>3</sup> )	96(6lb/ft <sup>3</sup> )	128(8lb/ft <sup>3</sup> )
Tensile Strength (kPa)	55	75	55	75
Permanent Linear Shrinkage (%)	1100°C x 24h ≤1.0		1300°C x 24h ≤3.0	
Thermal Conductivity (W/m·K)				
200°C	0.05	0.05	0.05	0.04
400°C	0.09	0.08	0.1	0.08
600°C	0.13	0.12	0.18	0.14
800°C	0.2	0.17	0.3	0.22
1000°C	0.28	0.25	0.46	0.33
1200°C	-	-	0.68	0.46

**CCEWOOL Bio Soluble Fiber Board**



Temperature Grade: 1200°C (2192°F), 1300°C (2372°F)  
 CCEWOOL Bio Soluble (Low Biopersistent) Fiber Board is rigid board using CCEWOOL soluble fiber bulk with organic and inorganic binder.  
 CCEWOOL Bio Soluble fiber board is able to contact with

fire directly and can be cut into different size. Low thermal conductivity, low heat storage and excellent resistance to thermal shock allow this product to be used in a wide range of application where temperature changes fast.

**Characteristics:**

- Low thermal conductivity;
- Low thermal storage;
- High tensile strength;
- Thermal shock resistance;
- Lightweight;
- Excellent corrosion resistance.

**Application:**

- Hot face lining for furnace and oven;
- Flue & chimney linings in furnaces & kilns;
- Insulating backup for these products:
- Fire brick;
- Insulating brick;
- Refractory castable.
- Insulation for electric appliance and heat treatment.

**TDS**

<b>CCEWOOL Bio Soluble Fiber Board</b>		
Classification Temperature	1200°C(2192°F)	1300°C(2372°F)
Color	Light Bluish	Light Bluish
Density (kg/m <sup>3</sup> )	300	300
Modules of Rupture (MPa)	≥0.25	≥0.25
Compressive Strength (MPa, 10% relative deformation)	0.15	0.15
Loss of Ignition (%)	≤7	≤7
Permanent Linear Shrinkage (%)	1100°C x 24h ≤2.0	1260°C x 24h ≤2.0
Thermal Conductivity (W/m·K)		
200°C	0.05	0.05

400°C	0.08	0.07
600°C	0.11	0.1
800°C	0.12	0.11
1000°C	0.15	0.14

## CCEWOOL Bio Soluble Fiber Paper



Temperature Grade: 1200°C (2192°F)

CCEWOOL Bio Soluble (Low Biopersistent) Fiber Paper is made from alkaline-earth silicate fibers primarily composed of SiO<sub>2</sub>, MgO, and CaO, blended with specific organic binders. This soluble fiber product is an innovative solution for high-temperature applications. With its unique calcium-magnesium chemical composition, it meets the requirements of applications up to 1200°C (2192°F) while also demonstrating significant solubility and environmental-friendly characteristics.

### Characteristics:

- Good handling strength;
- High temperature stability;
- Low heat storage;
- Resistant to thermal shock;
- Excellent flexibility;
- Easy to cut wrap and shape with tool;
- Low bio-persistence.

### Application:

- High temperature gasket and sealing in various application;
- Fire proof;
- Fireproof doors;
- Expansion joints ;

Fireplace converter gasket;

Gasket between Aluminum and zinc washer

- High temperature gaskets
- Metal lining;

Melting and holding furnaces refractory backing.

### TDS

<b>CCEWOOL Bio Soluble Fiber Paper</b>		
Classification temperature	1200 °C (2192°F)	
Chemical composition (%)		
	SiO <sub>2</sub>	62-68
	CaO	26-32
	MgO	4-7
Color	Light Bluish	
Density (kg/m <sup>3</sup> )	200	
Tensile Strength (MPa)	0.3	
Loss of Ignition (%)	4-8	
Thermal Conductivity (W/m·K)		
	200°C	0.05
	400°C	0.07
	600°C	0.11
	800°C	0.15
	1000°C	0.23
Specification (MM)	60000×610×1 (200'×24"×1/24")	
	30000×610×2 (100'×24"×1/12")	
	20000×610×3 (66'×24"×1/8")	
	15000×610×4 (50'×24"×1/6")	
	12000×610×5 (40'×24"×1/5")	
	10000×610×6 (33'×24"×1/4")	
	Min Width: 5cm (2")	
Package	Inner Plastic Bag+Outer Carton	

## CCEWOOL Bio Soluble Fiber Cloth



Temperature Grade: 1200°C (2192°F)

CCEWOOL Bio Soluble Fiber Cloth is woven cloth-shape high temperature products composed of soluble fibers, suitable for 1200C high temperature application. Each soluble yarn is reinforced with glass filament or stainless steel wire. A few binders will be burnt at a low temperature, thus it won't affect the insulation effect.

### Characteristics:

New type of low-carbon, environmental friendly and energy-saving product, no pollution or carcinogenic material was included;

Good thermal stability, unaffected by thermal shock;

Block infra-red radiation, good corrosion resistance;

Good fiber flexibility;

Biodegradable, industrial wastes of this product do not need to be dealt with.

### Application:

Expansion joints, protective blanket / curtains, welding blankets, heat shields, gaskets, pipes and cables and packaging. Widely used in welding, casting and aluminum plant, steel mills, boiler insulation and sealing, exhaust system, shipyards, refineries, power plants and chemical plants.

### TDS

CCEWOOL Bio Soluble Fiber Cloth		
Reinforcement	Glass Fiber	Stainless Steel
Continuous Temperature Use Limit (°C )	650	1000
Color	Light Bluish	
Density (kg/m <sup>3</sup> )	500	
Organic Content (%)	≤18	

## CCEWOOL Bio Soluble Fiber Rope



Temperature Grade: 1200°C (2192°F)

CCEWOOL Bio soluble fiber rope includes twisted rope, square rope and round rope, which is woven rope-shape high temperature products composed of unidirectional soluble fibers, suitable for 1200C high temperature application. Each soluble yarn is reinforced with glass filament or stainless steel wire to reinforce the tensile strength of ropes. A few binders will be burnt in a low temperature, thus it won't affect the insulation effect.

### Characteristics:

New type of low-carbon, environmental friendly and energy-saving product, no pollution or carcinogenic material was included;

Good thermal stability, unaffected by thermal shock;

Block infra-red radiation, good corrosion resistance;

Good fiber flexibility;

Biogradable, industrial wastes do not have to deal with.

### Application:

Ovens, industrial furnaces, boilers, high-temperature expansion joints and cable sealing or filling material.

Widely used in welding, casting and manufacturing aluminum, steel mills, boiler insulation and sealing, exhaust system, shipyards, refineries, power plants and chemical plants, but also be used as a tadpole-shaped gasket core. Three kinds of rope are each suitable for different application. Twisted rope is soft, square braided rope and round braided rope are tight and strong.

### TDS

CCEWOOL Bio Soluble Fiber Rope				
Classification	Round Braided Rope	Square Braided Rope	Twisted Rope	Woolen Rope

Reinforcement	Glass Fiber	Stainless Steel	Glass Fiber	Stainless Steel	Glass Fiber	Stainless Steel	Glass Fiber
Continuous Temperature Use Limit (°C )	650	1000	650	1000	650	1000	650
Color	Light Bluish		Light Bluish		Light Bluish		Light Bluish
Density (kg/m <sup>3</sup> )	550-600		550-600		550-600		550-600
Organic Content (%)	≤18		≤18		≤18		≤18

## CCEWOOL Bio Soluble Fiber Tape



Temperature Grade: 1200°C (2192°F)

CCEWOOL Bio Soluble Fiber Tape is woven tape-shape high temperature products composed of superior soluble fibers, suitable for 1000C high temperature application. Each soluble yarn is reinforced with glass filament or stainless steel wire. A few binders will be burnt in a low temperature, thus it won't affect the insulation effect.

### Characteristics:

New type of low-carbon, environmental friendly and energy-saving product, no pollution or carcinogenic material was included;

Good thermal stability, unaffected by thermal shock;

Block infra-red radiation, good corrosion resistance;

Good fiber flexibility;

Biogradable, industrial wastes do not have to deal with.

### Application:

Expansion joints, protective blanket / curtains, welding blankets, heat shields, gaskets, pipes and cables and

packaging. Widely used in welding, casting and aluminum plant, steel mills, boiler insulation and sealing, exhaust system, shipyards, refineries, power plants and chemical plants.

**TDS**

<b>CCEWOOL Bio Soluble Fiber Tape</b>		
Reinforcement	Glass Fiber	Stainless Steel
Continuous Temperature Use Limit (°C )	650	1000
Color	Light Bluish	
Density (kg/m <sup>3</sup> )	550-600	
Organic Content (%)	≤18	

**CCEWOOL Bio Soluble Fiber Yarn**



Temperature Grade: 1200°C (2192°F)

CCEWOOL Bio soluble fiber yarn is yarn-shape high-temperature products which composed of soluble fibers blended with certain percentage organic bulk, reinforced with fiberglass or stainless steel wire.

**Characteristics:**

New type of low-carbon, environmental friendly and energy-saving product, no pollution or carcinogenic material was included;

Good thermal stability, unaffected by thermal shock;

Block infra-red radiation, good corrosion resistance;

Good fiber flexibility;

Biodegradable, industrial wastes do not have to deal with.

**Application:**

Stitching fireproof cloth/tape/rope.

**TDS**

<b>CCEWOOL Bio Soluble Fiber Yarn</b>		
Reinforcement	Glass Fiber	Stainless Steel
Continuous Temperature Use Limit (°C )	650	1000
Color	Light Bluish	
Density (kg/m <sup>3</sup> )	-	
Organic Content (%)	≤18	