

CCEWOOL® Low Biopersistent Fiber Blanket 2192



Temperature Grade 1200° C (2192° F)
CCEWOOL® Low Biopersistent Fiber Blanket 2192 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. CCEWOOL® Low Biopersistent Fiber Blanket 2192 exhibits outstanding chemical stability and is

unaffected by most chemicals except for hydrofluoric acid, phosphoric acid, and concentrated alkalis. If it becomes wet or saturated with water or steam, its thermal and physical properties are not compromised. It's certified by Fraunhofer laboratory.

Characteristic:

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

Application:

- Reusable insulation for steam and gas turbines;
- High-temperature kiln and furnace insulation;
- Furnace door linings and seals;
- Furnace repairs;
- Boiler and incinerator linings;
- Seals and gaskets;
- Automotive heat shields;
- Appliance insulation;
- Fire protection;
- Duct, stack and flue linings;
- Molten metal splash protection.

TDS

CCEWOOL® Low Biopersistent Fiber Blanket 2192

Classification Temperature (°C)(°F)	1200°C(2192°F)	
Chemical Composition (%)		
SiO2	65-68	
CaO	27-33	
MgO	2-7	
CaO+MgO	-	
Color	Light Bluish	
Shot Content (%)	≤12	
Density (kg/m³)(4lb/ft³)	96(6lb/ft³)	128(8lb/ft³)
Tensile Strength (kPa)	55	75
Permanent Linear Shrinkage (%)	1200°C x 24h ≤2.8	
Thermal Conductivity (W/m·K)		
200°C	0.05	0.04
400°C	0.09	0.08
600°C	0.19	0.15
800°C	0.3	0.2
1000°C	0.48	0.28
1200°C	0.69	0.49

Thickness	Density (kg/m ³)			Length	Width
mm	96	128	160	mm	mm
13	√	√	○	14640	610, 1220
19	√	√	○	9760	
25	√	√	√	7320	
38	√	√	√	4880	
50	√	√	-	3660	

Thickness	Density (lb/ft ³)			Length	Width
in	6#	8#	10#	in	in
1/2"	√	√	○	600"	24", 48"
3/4"	√	√	○	400"	
1"	√	√	√	300"	
3/2"	√	√	√	200"	

2"	√	√	-	150"	
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Note: (√) is standard size, Custom size are available

CCEWOOL® Low Biopersistent Fiber Blanket 2372



Temperature Grade 1300° C (2372° F)

CCEWOOL® Low Biopersistent Fiber Blanket 2372 is the latest development in soluble fiber blankets, manufactured using proprietary fiberization technology, offering a classification temperature of 1300° C with a long-term usage temperature of up to 1200° C. CCEWOOL® Low Biopersistent Fiber Blanket 2372 has a slag content of

less than 5%, and compared to traditional soluble fiber blankets, it has a fiber content exceeding 30%, resulting in lower thermal conductivity and superior tensile strength. It exhibits outstanding chemical stability and is unaffected by most chemicals except for hydrofluoric acid, phosphoric acid, and concentrated alkalis. It is an energy-saving solution that enhances application efficiency and reduces emissions. It's certified by Fraunhofer laboratory.

Characteristics:

- Slag ball content less than 5%, extremely low thermal conductivity;
- Fiber content exceeding 30%;
- Low heat storage;
- High tensile strength;
- Excellent thermal shock resistance;
- Lightweight;
- Outstanding corrosion resistance.

Application:

- High-temperature furnace and kiln linings;
- Furnace door linings and seals;
- Boiler insulations;
- Pipe and duct insulation;
- Heat shields;
- Seals and gaskets;
- Carbon baking furnace covers;
- Glass tank crown insulation;



Expansion joints.

TDS

CCEWOOL® Low Biopersistent Fiber Blanket 2372		
Classification Temperature (°C)(°F)	1300℃(2372°F)	
Chemical Composition (%)		
SiO2	≥70	
CaO	-	
MgO	-	
CaO+MgO	≥20	
Color	Light Bluish	
Shot Content (%)	≤12	
Density (kg/m³)(4lb/ft³)	96(6lb/ft³)	128(8lb/ft³)
Tensile Strength (kPa)	55	75
Permanent Linear Shrinkage (%)	1300℃ x 24h ≤3.0	
Thermal Conductivity (W/m·K)		
200℃	0.05	0.04
400℃	0.1	0.08
600℃	0.18	0.14
800℃	0.3	0.22
1000℃	0.46	0.33
1200℃	0.68	0.46

Thickness	Density (kg/m ³)			Length	Width
mm	96	128	160	mm	mm
13	√	√	○	14640	610, 1220
19	√	√	○	9760	
25	√	√	√	7320	
38	√	√	√	4880	
50	√	√	-	3660	

Thickness	Density (lb/ft ³)			Length	Width
in	6#	8#	10#	in	in

1/2"	√	√	○	600"	24", 48"
3/4"	√	√	○	400"	
1"	√	√	√	300"	
3/2"	√	√	√	200"	
2"	√	√	-	150"	

Note: (√) is standard size, Custom size are available

CCEWOOL® Ceramic Fiber Blanket DB



Temperature Grade 1100° C (2012° F)

CCEWOOL® Ceramic Fiber Blanket DB is a new type of backing refractory insulation material in white appearance, uniform dimensions, and combines fire resistance, insulation, and thermal retention functions in one, without any binders.

Refractory Ceramic fiber blankets are unaffected by oil erosion and can quickly regain their thermal performance and physical characteristics after drying. It is primarily used for furnace lining insulation and is an economically effective insulation filling material. The installation speed of CCEWOOL® Ceramic Fiber

Blanket DB can be four times faster than regular block insulation materials and comes at a competitive price compared to mineral wool.

Characteristics:

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

Application:

- Back-up for lining systems
- Filler for insulating pads
- Expansion joint material

STD:

CCEWOOL® Ceramic Fiber Blanket DB	
Classification temperature	1100°C (2012°F)

Operation Temp(°C)(°F)	982 (1800°F)
Density (kg/m3)	64/ 96/ 128/160(4,6,8,10lb/ft3)
Shot Content(%)	≤15
Color	White
Chemical Composition of refractory ceramic blanket (%)	
Al2O3	≥43
SiO2	≥52
ZrO2	-
Permanent Change on Heating (%), EN1094-1 After 24 hours	
®950℃ (1742°F)	≤-3
®1000℃ (1832°F)	-
®1100℃ (2012°F)	-
®1200℃ (2192°F)	-
®1300℃ (2372°F)	-
®1400℃ (2552°F)	-
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	28
96kg/m3(6lb/ft3)	45
128kg/m3(8lb/ft3)	70
160kg/m3(10lb/ft3)	-
Heat Conductive Co-efficient W/(m·k)(128kg/m3)	
200℃ (392°F)	0.07
400℃ (752°F)	0.12
600℃ (1112 °F)	0.2
800℃ (1472°F)	0.35
1000℃ (1832°F)	-

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24", 48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available

CCEWOOL® Ceramic Fiber Blanket S



Temperature Grade 1260° C (2300° F)

CCEWOOL® Ceramic Fiber Blanket S is a high-strength needled blanket made from classic series refractory ceramic fiber spun fiber. This product contains no organic binders. Manufactured through a unique internal needle punching process with tensile strength exceeding 75KPa, making it safe, stable, energy-efficient, and highly effective. CCEWOOL® Ceramic Fiber Blanket S insulation material offers a variety of thickness, width and density to meet energy-saving requirements under different conditions.

Characteristics:

- Excellent handling strength
- Excellent hot strength
- Low thermal conductivity
- Low heat storage
- Light weight
- Resiliency
- Thermal shock resistance
- High heat reflectance
- Excellent corrosion resistance
- Excellent thermal stability
- Excellent sound absorption
- Excellent fire protection



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.

Steel industry

Heat treating and annealing furnaces

Furnace door linings and seals

Soaking pit covers and seals

Furnace hot face repairs

Reheat furnaces

Ladle covers

Power generation

Boiler Insulation

Boiler Doors

Reusable Turbine Covers

Pipe Covering

Insulation of Commercial Dryers and Covers

Veneer Over Existing Refractory

Stress Relieving Furnaces

Glass Furnace Crown Insulation

Fire Protection

STD:

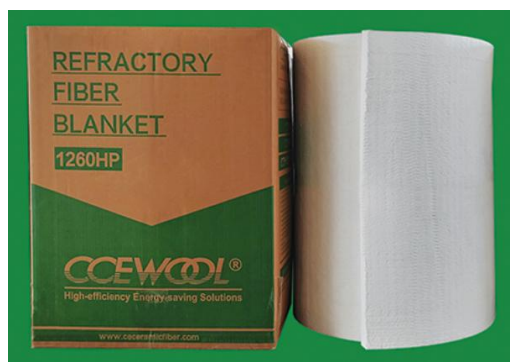
CCEWOOL® Ceramic Fiber Blanket S		
Classification temperature	1260 (2300°F)	
Operation Temp(°C)(°F)	1050 (1922°F)	
Density (kg/m3)	64/ 96/ 128/160(4,6,8,10lb/ft3)	
Shot Content(%)	≤15	
Color	White	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥44	
SiO2	≥52	
ZrO2	-	
Permanent Change on Heating (%), EN1094-1		
After 24 hours		
®950℃ (1742°F)	-	
®1000℃ (1832°F)	1.5	
®1100℃ (2012°F)	2.5	

①200℃ (2192°F)	3
①300℃ (2372°F)	-
①400℃ (2552°F)	-
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	35
96kg/m3(6lb/ft3)	55
128kg/m3(8lb/ft3)	75
160kg/m3(10lb/ft3)	110
Heat Conductive Co-efficient W/(m·k)(128kg/m3)	
200℃ (392°F)	0.07
400℃ (752°F)	0.12
600℃ (1112 °F)	0.2
800℃ (1472°F)	0.3
1000℃ (1832°F)	0.45

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24", 48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available



CCEWOOL® Ceramic Fiber Blanket HPS

Temperature Grade 1260° C (2300° F)

CCEWOOL® Ceramic Fiber Blanket HPS, purified from raw materials with fewer impurities, is made from high-purity refractory ceramic fiber spun fiber. Compared to RCF Blanket S, this product is whiter and has a lower thermal conductivity. It contains no organic binders. Manufactured through a unique internal needle punching process, with tensile strength exceeding 85KPa, providing higher performance and longer lifespan in applications involving heat flow or chemical corrosion. CCEWOOL® Ceramic Fiber Blanket HPS insulation material offers a variety of thickness, width, and density.

Characteristics:

- Excellent handling strength
- Excellent hot strength
- Low thermal conductivity
- Low heat storage
- Light weight
- Resiliency
- Thermal shock resistance
- High heat reflectance
- Excellent corrosion resistance
- Excellent thermal stability

Application:

- 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.

STD:

CCEWOOL® Ceramic Fiber Blanket HPS	
Classification temperature	1260 (2300°F)
Operation Temp(°C)(°F)	1100 (2012°F)
Density (kg/m3)	64/ 96/ 128/160(4,6,8,10lb/ft3)
Shot Content(%)	≤15
Color	White
Chemical Composition of refractory ceramic blanket (%)	
Al ₂ O ₃	≥44
SiO ₂	≥55
ZrO ₂	-
Permanent Change on Heating (%), EN1094-1 After 24 hours	
®950°C (1742°F)	-
®1000°C (1832°F)	1.5
®1100°C (2012°F)	2.2
®1200°C (2192°F)	3
®1300°C (2372°F)	-
®1400°C (2552°F)	-
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	45
96kg/m3(6lb/ft3)	65
128kg/m3(8lb/ft3)	85
160kg/m3(10lb/ft3)	125
Heat Conductive Co-efficient W/(m·k)(128kg/m3)	
200°C (392°F)	0.07
400°C (752°F)	0.12
600°C (1112 °F)	0.2
800°C (1472°F)	0.3
1000°C (1832°F)	0.4

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	

38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24", 48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available

CCEWOOL® Ceramic Fiber Blanket LZ



Temperature Grade 1400°C (2550°F)

CCEWOOL® Ceramic Fiber Blanket LZ is primarily made from refractory ceramic fiber spun fiber as raw material with properly amount of Zr2O3, double-sided internal needle punching process. It is a lightweight, flexible refractory fiber insulation material resistant to high temperatures up to 1400°C (2550°F). CCEWOOL® Ceramic Fiber Blanket LZ exhibit excellent toughness, elasticity, and workability, making them versatile high-temperature insulation products.

Characteristics:

- High compressive strength and long service life;
- Low heat capacity and low thermal conductivity;
- Non-brittle material with good toughness;
- Small dimensional tolerance and good flatness;
- Easy to cut and install, convenient for construction;
- Excellent resistance to wind erosion;
- Continuous production with uniform fiber distribution and stable performance;
- Excellent sound absorption and noise reduction performance.

Applications:



Industrial kiln linings and backing materials with a long-term operating temperature between 1150° C to 1250° C.

Insulation materials for industrial kiln expansion joints, furnace doors, and top covers.

Insulation materials for high-temperature pipelines.

High-temperature insulation gaskets with a long-term operating temperature below 1250° C.

Raw materials for zirconia-alumina refractory ceramic fiber modules/folded blocks.

STD:

CCEWOOL® Ceramic Fiber Blanket LZ		
Classification temperature		1400 (2550°F)
Operation Temp(°C)(°F)		1200℃ (2192°F)
Density (kg/m3)		64/ 96/ 128/160(4,6,8,10lb/ft3)
Shot Content(%)		≤15
Color		White
Chemical Composition of refractory ceramic blanket (%)		
Al2O3		≥44
SiO2		≥50
ZrO2		≥5
Permanent Change on Heating (%), EN1094-1 After 24 hours		
®950℃ (1742°F)		-
®1000℃ (1832°F)		-
®1100℃ (2012°F)		1.5
®1200℃ (2192°F)		2
®1300℃ (2372°F)		3
®1400℃ (2552°F)		-
Tensile Strength(Kg/m3), EN1094-1 KPa		
64kg/m3(4lb/ft3)		45
96kg/m3(6lb/ft3)		65
128kg/m3(8lb/ft3)		85
160kg/m3(10lb/ft3)		125
Heat Conductive Co-efficient W/(m·k)(128kg/m3)		
200℃ (392°F)		0.07
400℃ (752°F)		0.12
600℃ (1112 °F)		0.2
800℃ (1472°F)		0.3
1000℃ (1832°F)		0.43

Thickness	Density (kg/m3)	Length	Width
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mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24", 48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available

CCEWOOL® Ceramic Fiber Blanket 2600



Temperature Grade 1430°C (2600°F)

CCEWOOL® Ceramic Fiber Blanket 2600 is made from high-purity alumina, zirconia, and silica as raw materials through a unique fiber manufacturing process. It possesses excellent insulation properties and exhibits extremely low shrinkage characteristics at high temperatures. Its long-term operating temperature reaches around 1350°C (2462°F). This product is white in color, flexible in texture, has good flatness, and is highly temperature-resistant, delivering excellent fire resistance and insulation. It is

an ideal material for refractory, insulation, and thermal insulation applications in high-temperature environments.

Characteristics:

Excellent handling strength;

Excellent hot strength;
Low thermal conductivity;
Low heat storage;
Light weight;
Resiliency;
Thermal shock resistance;
High heat reflectance;
Excellent corrosion resistance;
Excellent thermal stability.

Applications:

Furnace linings;
Boiler insulation;
Temperature control in heat treatment processes;
Insulation for the roofs of glass furnaces;
Furnace door seals;
Lining for flue ducts;
Insulation for pipelines;
Insulation components in transportation equipment;
Fire protection;
Thermal sealing gaskets for household appliances;
Thermal stress relief insulation at outdoor welding joints;
High-temperature insulation;
Fire-resistant insulation for fire shutter doors.

TDS

CCEWOOL® Ceramic Fiber Blanket 2600		
Classification temperature		1430HZ (2600°F)
Operation Temp(°C)(°F)		1350°C (2462°F)
Density (kg/m3)		96/ 128/ 160 (6,8,10lb/ft3)
Shot Content(%)		≤12
Color		White
Chemical Composition of refractory ceramic blanket (%)		
	Al ₂ O ₃	≥35
	SiO ₂	≥49
	ZrO ₂	≥15
Permanent Change on Heating (%), EN1094-1 After 24 hours		

®950℃ (1742°F)	-
®1000℃ (1832°F)	-
®1100℃ (2012°F)	-
®1200℃ (2192°F)	1
®1300℃ (2372°F)	2
®1400℃ (2552°F)	3
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	-
96kg/m3(6lb/ft3)	65
128kg/m3(8lb/ft3)	85
160kg/m3(10lb/ft3)	125
Heat Conductive Co-efficient W/(m·k)(128kg/m3)	
200℃ (392°F)	0.06
400℃ (752°F)	0.11
600℃ (1112 °F)	0.16
800℃ (1472°F)	0.23
1000℃ (1832°F)	0.35

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24",48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	

1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available

CCEWOOL® PUREWOOL Ceramic Fiber Blanket



Temperature Grades 1260° C (2300° F)
and 1430° C (2600° F)

CCEWOOL® PUREWOOL Ceramic Fiber Blanket is a premium product among refractory ceramic fibers. It is made from upgraded materials using high-purity alumina, zirconia, and silica as raw materials. Due to its extremely low impurity content, this blanket is whiter in color. Ultra-long spun fibers are interlocked through a double-sided

internal needle punching process, providing a tensile strength of up to 90KPa. With improvements made from the raw materials, CCEWOOL® PUREWOOL Ceramic Fiber Blanket offers a longer lifespan and superior thermal insulation performance. This insulation material is available in various thicknesses, widths, and densities to meet energy-saving requirements under different conditions.

Characteristics:

- Excellent handling strength;
- Excellent hot strength;
- Low thermal conductivity;
- Low heat storage;
- Light weight;
- Resiliency;
- Thermal shock resistance;
- High heat reflectance;
- Excellent corrosion resistance;
- Excellent thermal stability.

Applications:

- 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;
Steel industry;
Heat treating and annealing furnaces;
Furnace door linings and seals;
Soaking pit covers and seals;
Furnace hot face repairs;
Reheat furnaces;
Ladle covers;
Power generation;
Boiler Insulation;
Boiler Doors;
Reusable Turbine Covers;
Pipe Covering;
Insulation of Commercial Dryers and Covers;
Veneer Over Existing Refractory;
Stress Relieving Furnaces;
Glass Furnace Crown Insulation;
Fire Protection.

STD:

CCEWOOL® PUREWOOL Ceramic Fiber Blanket		
Classification temperature	1260(2300°F)	1430(2600°F)
Operation Temp(°C)(°F)	1100℃(2012°F)	1350℃(2462°F)
Density (kg/m3)	96/ 128/ 160 (6,8,10lb/ft3)	
Shot Content(%)	≤12	
Color	White	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥44	≥35
SiO2	≥55	≥49
ZrO2	-	≥15
Permanent Change on Heating (%), EN1094-1 After 24 hours		
®950℃ (1742°F)	-	-
®1000℃ (1832°F)	1.5	-
®1100℃ (2012°F)	2	-
®1200℃ (2192°F)	2.7	1
®1300℃ (2372°F)	5.5	2
®1400℃ (2552°F)		3
Tensile Strength(Kg/m3), EN1094-1 KPa		

64kg/m3(4lb/ft3)	-	-
96kg/m3(6lb/ft3)	60	60
128kg/m3(8lb/ft3)	90	90
160kg/m3(10lb/ft3)	130	130
Heat Conductive Co-efficient W/(m·k)(128kg/m3)		
200℃ (392°F)	0.07	0.06
400℃ (752°F)	0.12	0.1
600℃ (1112 °F)	0.2	0.15
800℃ (1472°F)	0.3	0.2
1000℃ (1832°F)	0.35	0.3

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24",48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available



CCEWOOL® Water Repellent Ceramic Fiber Blanket

Temperature Grades 1100°C (2012°F), 1260°C (2300°F)

CCEWOOL® Water Repellent Ceramic Fiber Blanket is a refractory ceramic fiber hydrophobic (water-repellent) blanket made from high-strength needled blanket produced from refractory ceramic fiber spun fiber. It features a solvent-based high-temperature nano-hydrophobic material as a surface treatment agent and is manufactured using a unique double-sided internal needle punching process. This product achieves overall water repellency for refractory ceramic fiber blankets and exhibits excellent hydrophobic properties, greatly enhancing the insulation performance of the fibers. It solves the issues of reduced thermal conductivity and insulation body corrosion caused by moisture absorption in conventional fiber blankets.

Characteristics:

Excellent hydrophobicity;
Excellent chemical stability;
Excellent thermal stability;
Excellent tensile strength;
Low thermal conductivity;
Low heat capacity;
Excellent insulation properties;
Good sound absorption

Applications:

Sheathed steel beams and ventilation ducts;
Installation of firewalls, doors, and ceilings;
Insulation of cables and wires inside wall pipes;
Fire protection for ship decks and bulkheads;
Soundproofing enclosures and measurement rooms;
Sound insulation in industrial and power plants;
Sound barriers;
Building soundproofing;
Soundproofing for ships and automobiles.

TDS

CCEWOOL® Water Repellent Ceramic Fiber Blanket		
Classification temperature	1100°C (2012°F)	1260 (2300°F)
Operation Temp(°C)(°F)	982 (1800°F)	1050 (1922°F)
Density (kg/m3)	64/ 96/ 128(4,6,8lb/ft3)	
Water content(%)	≤1	
Hydrophobicity(%)	≥99	
Shot Content(%)	≤15	≤15

Color	White	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥43	≥44
SiO2	≥52	≥52
ZrO2	-	-
Permanent Change on Heating (%), EN1094-1 After 24 hours		
®950℃ (1742°F)	≤-3	-
®1000℃ (1832°F)	-	1.5
®1100℃ (2012°F)	-	2.5
®1200℃ (2192°F)	-	3
®1300℃ (2372°F)	-	-
Tensile Strength(Kg/m3), EN1094-1 KPa		
64kg/m3(4lb/ft3)	28KPa min.	35KPa min.
96kg/m3(6lb/ft3)	45KPa min.	55KPa min.
128kg/m3(8lb/ft3)	70KPa min.	75KPa min.
Heat Conductive Co-efficient W/(m·k)(128kg/m3)		
200℃ (392°F)	0.07	0.07
400℃ (752°F)	0.12	0.12
600℃ (1112 °F)	0.2	0.2
800℃ (1472°F)	0.35	0.3
1000℃ (1832°F)	-	0.45

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
25	○	√	√	√	7320	610, 1220
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
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in	4#	6#	8#	10#	in	in
1"	○	√	√	√	300"	610, 1220 (24",48")
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available

CCEWOOL® Polycrystalline Wool Fiber Blanket



Temperature Grade 1600°C (2912°F)

CCEWOOL® Polycrystalline Wool Fiber Blanket is an ideal choice for high-temperature and chemically corrosive applications.

CCEWOOL® Polycrystalline Wool Fiber Blanket is produced using sol-gel technology to create fibers of specific dimensions, which are then formed into blankets through a double-sided needling process. The product exhibits excellent strength and flexibility. It is

a refractory fiber that exists in the form of mullite crystal phases and maintains its outstanding dimensional stability and elasticity even at high temperatures. The introduction of polycrystalline fiber blankets has effectively filled the gap in the field of fibers for long-term use at temperatures ranging from 1350°C (2462°F) to 1500°C (2732°F).

Polycrystalline fiber blankets are more resistant to acids and alkalis than refractory ceramic fibers and perform exceptionally well in high-temperature environments subjected to oxidation, reduction, and chemical corrosion.

CCEWOOL® Polycrystalline Wool Fiber Blanket is virtually free of shot, resulting in extremely low thermal conductivity and excellent thermal insulation properties.

Characteristics:

- Almost no shot, white color, and high purity of raw materials;
- Good high temperature resistance and good high-temperature stability;
- Extremely low thermal conductivity, low linear shrinkage after heating;
- Stable chemical properties and strong corrosion resistance;
- Uniform fiber diameter and high tensile strength;
- Excellent thermal stability and thermal shock resistance;
- Excellent chemical stability;



High tensile strength;
Low thermal conductivity;
Low heat capacity;
High thermal reflectance;
Excellent thermal strength.

Application:

Hot surface lining insulation of high temperature industrial furnace;
Wrapping of burner block;
Expansion joint;
High temperature gasket in smelting furnace;
Insulation of boilers, tanks, and furnaces in the power generation industry;
Insulation of engines, mufflers, and exhaust systems in the automotive industry;
Insulation for the shipbuilding industry, ships, and oil drilling platforms;
New energy industry, battery fireproof covers, etc.

TDS

CCEWOOL® Polycrystalline Wool Fiber Blanket	
Classification Temperature(°C)(°F)	1600°C (2912°F)
Continuous Temperature Use Limit (°C)(°F)	1500°C (2732°F)
Chemical Composition (%)	
Al ₂ O ₃ (%)	71-73
SiO ₂ (%)	27-29
Leachable Chlorides	Trace
Color	White
Density (kg/m ³)	96/128 (6,8lb/ft ³)
Tensile Strength(kPa)	≥80
Permanent Linear Shrinkage (%)	1400°C x24h<1.0
Thermal Conductivity (W/m-K)	
400°C	0.09
600°C	0.16
800°C	0.22
1000°C	0.28
1200°C	0.36
1400°C	0.45

Specifications	
Thickness	3-25mm (0.12"-1")
Width	610mm (24")
Length	7200mm, 10800mm, 14400mm, etc., can be customized
Density	96kg/m3 (6lb/ft3)
	128kg/m3 (8lb/ft3)
	160kg/m3 (10lb/ft3)

CCEWOOL® Ultra-thin Polycrystalline Wool Fiber Blanket 3mm



Temperature Grade 1600°C (2912°F)

CCEWOOL® Ultra-thin Polycrystalline Wool Fiber Blanket 3mm revolutionizes thermal protection and safety for new energy vehicle batteries.

In EV battery systems and high-temperature equipment, insulation materials are under more pressure than ever - they must deliver exceptional thermal efficiency in tight, complex spaces while withstanding impact, vibration, and prolonged high heat.

CCEWOOL® Ultra-thin PCW Blanket has pushed beyond the limits to create a 3mm Polycrystalline Fiber Blanket engineered for the most demanding applications:

- Precision Heat Shield - Fits seamlessly between battery cells to block thermal transfer.
- Thermal Runaway Containment - Lines module walls to prevent heat spread.
- Lightweight & Flexible - Perfect for complex, space-limited designs.
- Extreme Stability - Withstands frequent cycling and sudden high-temperature shocks.

Now available in a 3 - 25mm full thickness range, CCEWOOL® Polycrystalline Fiber Blankets meet the needs of EV systems, precision components, and advanced high-temperature equipment. This 3mm innovation is more than a product - it's a leap forward in high-end insulation technology.

Characteristics:

Ultra-Thin High Performance,
Ultra-Low Thermal Conductivity,
High Strength & Flexibility,

Excellent Thermal Stability,
Chemical Stability.

Application:

EV Battery Systems

Cell-to-Cell Thermal Barriers: At just 3mm thickness, creates an effective heat shield in compact spaces, preventing thermal runaway propagation.

Module Wall Protection: Serves as a protective layer to stop heat from spreading when localized battery cells overheat.

Battery Pack Bottom Insulation: Enhances vehicle safety by resisting external impact or thermal radiation.

TDS

CCEWOOL® Ultra-thin PCW Blanket 3mm	
Classification Temperature	1600°C (2912°F)
Continuous Temperature Use Limit	1500°C (2732°F)
Chemical Composition (%)	
Al ₂ O ₃ (%)	71-73
SiO ₂ (%)	27-29
Shot Content (%)	0-2
Color	White
Loss On Ignition (%)	0.1
Average Fiber Diameter (μm)	5.5-7.5
Permanent Linear Shrinkage (%)	1400°C x24h<1.0
	1600°C x24h<1.0
Thermal Conductivity (W/m-K) (96kg/m ³)	
600°C	0.067
1000°C	0.129
1200°C	0.170

Specifications	
Thickness	3mm (0.12")
Width	610mm (24")
Length	7200mm, 14400mm
Density	96kg/m ³ (6lb/ft ³)