

## CCEWOOL® Low Biopersistent Fiber Bulk



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

CCEWOOL® Low Biopersistent Fiber Bulk consists of calcium, magnesium, silicate. The fibers can be degraded in the human body to meet the requirements of health and environmental protection. CCEWOOL® Low Biopersistent Fiber Bulk serves as the foundation for soluble fiber products such as blanket, board, paper and other vacuum-formed products. It can meet European regulatory requirements (Directive 97/69/EC).

### Characteristics:

Excellent thermal shock resistance;  
Excellent thermal insulating performance;  
Low thermal conductivity;  
Low heat storage;  
Low bio-persistence.

### Application:

Raw material for finished soluble fiber products;  
Insulating fill for complex spaces and difficult access;  
Packing expansion Joints;  
Tube seal packing;  
Fire door infill.

### TDS

<b>CCEWOOL® Low Biopersistent Fiber Bulk</b>		
Classification Temperature	1200°C(2192°F)	1300°C(2372°F)
Chemical Composition (%)		
SiO <sub>2</sub>	65-68	≥70
CaO	27-33	-
MgO	2-7	-
CaO+MgO	-	≥20
Color	Light Bluish	Light Bluish
Shot Content(%)	≤12	≤12
Fiber Diameter(μm)	3-5	3-5

## CCEWOOL® Low Biopersistent Chopped Fiber



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

CCEWOOL® LBP Chopped Fiber is manufactured from low biopersistent fiber (AES) using professional automated chopping equipment. Based on CCEWOOL® soluble fiber bulk as the raw material, the product is processed through a precisely controlled mechanical chopping method to achieve a more uniform fiber length distribution, thereby meeting the requirements of various industrial applications and downstream processing methods.

CCEWOOL® LBP Chopped Fiber can be processed into different fiber lengths and particle sizes according to customer requirements, in order to meet the needs of different production processes and application conditions. It can be used as an important raw material for soluble fiber boards, soluble fiber papers, and other wet-formed fiber products. It is also suitable for use as loose-fill insulation in high-temperature equipment such as industrial furnaces, boilers, pipelines, and chimneys.

As it is based on a low biopersistent fiber system, this product maintains good high-temperature performance while offering higher biosolubility, helping meet modern industrial requirements for occupational health and environmental standards.

According to different production process requirements, CCEWOOL® LBP Chopped Fiber is available in multiple specifications, including:

Milled Fiber

Fine Chopped Fiber

Medium Chopped Fiber

Coarse Chopped Fiber

### **Characteristics:**

Excellent high-temperature stability;

Low thermal conductivity and low heat storage;

Excellent chemical stability;

Good thermal stability;

Excellent sound absorption performance.

### **Applications:**

CCEWOOL® LBP Chopped Fiber is widely used in high-temperature industrial insulation systems and in the production of fiber products, including:

Raw material for LBP fiber boards, fiber papers, textiles, and vacuum-formed shapes;

Insulation filling material for industrial furnaces and other high-temperature equipment;

Expansion joint filler;  
Furnace bottom sealing material;  
Pipe sealing material;  
Burner block filler;  
Chimney and flue insulation.

**TDS**

<b>CCEWOOL® LBP Chopped Fiber</b>		
Classification Temperature	1200°C(2192°F)	1300°C(2372°F)
Chemical Composition (%)		
SiO2	65-68	≥70
CaO	27-33	-
MgO	2-7	-
CaO+MgO	-	≥20
Color	Light Bluish	Light Bluish
Shot Content(%)	≤12	≤12

Temperature Grade	Fiber Type	Fibre Coating	Fiber Diameter	Description
2192°F (1200°C)	Spun	Lubricated or Unlubricated	3-5µm	Milled Fiber
2192°F (1200°C)	Spun		3-5µm	Fine Chopped Fiber
2192°F (1200°C)	Spun		3-5µm	Medium Chopped Fiber
2192°F (1200°C)	Spun		3-5µm	Coarse Chopped Fiber
2372°F (1300°C)	Spun		3-5µm	Chopped Fiber

**CCEWOOL® Ceramic Bulk Fiber**



Temperature Grades: 1100°C (2012°F), 1260°C (2300°F), 1400°C (2550°F), 1430°C (2600)

CCEWOOL® Ceramic Bulk Fiber is produced by melting high-purity raw materials such as clay grog, aluminum oxide powder, silica powder, and zircon sand in an industrial electric furnace at high temperatures to form a fluid. Then, it is transformed into fiber-like structures through processes like compressed air blowing or spinning with a centrifuge, and collected to create ceramic fiber cotton.

CCEWOOL® Ceramic Bulk Fiber can resist most

types of chemical corrosion. They are lightweight, durable, have low heat storage capacity, effectively save energy, and exhibit excellent resistance to thermal shocks, making them suitable for use in harsh environments. CCEWOOL® Ceramic Bulk Fiber serves as a raw material for the production of refractory ceramic fiber blankets, boards, papers, and can also be directly used in various high-temperature applications such as high-temperature insulation and packaging materials.

**Characteristics:**

- Low heat capacity and low thermal conductivity;
- Excellent chemical stability;
- Excellent thermal stability, resistance to pulverization at high temperature;
- With no binders or corrosive substances;
- Excellent thermal shock resistance;
- Lightweight.

**Applications:**

- Raw material for fiber blanket, board, textile and unshaped vacuum formed products;
- Fillings for wall lining gap in high temperature furnace, heating device;
- Fiber spraying;
- Raw material for coatings;
- Insulation fillings for corner and complex space.

**TDS**

<b>CCEWOOL® Ceramic Bulk Fiber</b>					
Description	1100	1260S	1260 HPS	1400	1430 HZ
Fiber Diameter(μm)	3.0-5.0				
Chemical Composition(%)					
Al <sub>2</sub> O <sub>3</sub>	≥43	≥44	≥44	≥52	≥35
SiO <sub>2</sub>	≥52	≥52	≥55	≥47	≥49
ZrO <sub>2</sub>	-	-	-	-	≥15
Color	White	White	White	White	White
Shot Content(%)	≤15	≤15	≤15	≤15	≤12
Packing	Braided Bag/ Carton				

**CCEWOOL® Ceramic Chopped Fiber**



Temperature Grades: 1260°C (2300°F), 1400°C (2550°F), 1430°C (2600°F)  
 CCEWOOL® RCF Chopped Fiber is manufactured from CCEWOOL® ceramic fiber bulk using professional automated

chopping equipment. Through a precisely controlled mechanical chopping process, the product achieves a more uniform fiber length distribution, enabling it to meet the requirements of various industrial applications and downstream processing methods.

CCEWOOL® RCF Chopped Fiber is primarily used as an important raw material for ceramic fiber boards, ceramic fiber papers, and other wet-formed fiber products. It is also widely used in insulation systems for high-temperature equipment such as industrial furnaces, boilers, pipelines, and chimneys. The upgraded automated chopping system enables stable control of fiber length and particle size distribution, providing improved stability and consistency during production and processing.

According to different production process requirements, CCEWOOL® RCF Chopped Fiber is available in multiple specifications, including:

- Milled Fiber
- Fine Chopped Fiber
- Medium Chopped Fiber
- Coarse Chopped Fiber

**Characteristics:**

- Low heat storage and low thermal conductivity;
- Excellent chemical stability;
- Good thermal stability;
- Free from binders and corrosive substances;
- Excellent sound absorption performance.

**Applications:**

- CCEWOOL® RCF Chopped Fiber is widely used in high-temperature industrial insulation systems and in the production of fiber products, including:
- Raw material for ceramic fiber boards, fiber papers, textiles, and vacuum-formed shapes;
- Insulation filling material for industrial furnaces and other high-temperature equipment;
- Expansion joint filler;
- Furnace bottom sealing material;
- Pipe sealing material;
- Burner block filler;
- Chimney and flue insulation.

**TDS**

<b>CCEWOOL® RCF Chopped Fiber</b>			
Classification Temperature	1260	1400HA	1430HZ
Chemical Composition(%)			
Al2O3	≥43	≥52	≥35
SiO2	≥54	≥47	≥49
ZrO2	-	-	≥15
Color	White		
Shot Content(%)	≤12		

Packing	Vacuumed plastic bag+pallet
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Temperature Grade	Fiber Type	Fibre Coating	Fiber Diameter	Description
2300°F (1260°C)	Blown	None	2-4µm	Milled Fiber
2300°F (1260°C)	Blown	None	2-4µm	Fine Chopped Fiber
2300°F (1260°C)	Blown	None	2-4µm	Medium Chopped Fiber
2300°F (1260°C)	Blown	None	2-4µm	Coarse Chopped Fiber
2550°F (1400°C)	Blown	None	2-4µm	Chopped Fiber
2300°F (1260°C)	Spun	None	3-5µm	Chopped Fiber
2600°F (1430°C)	Spun	None	3-5µm	Chopped Fiber

## CCEWOOL® Ceramic Fiber bulk specialized for vacuum formed shapes



Temperature Grades: 1260°C (2300°F), 1430°C (2600°F)  
CCEWOOL® Ceramic Fiber bulk specialized for vacuum formed shapes is produced with high-purity clay clinker, alumina powder, silica powder, and zircon sand and other premium raw materials, through innovative production process. The raw materials are melted at high temperatures in an industrial electric furnace, then processed into fiber through compressed air blowing technology. Then the fiber is collected by a wool collector, and forms high-quality refractory ceramic fiber blown bulk.

This specialized fiber bulk has a fiber diameter of 2-4µm. It's unlubricated, making it the best product for manufacturing vacuum formed shapes. We also produce bio soluble fiber(AES fiber) for vacuum formed shape, to meet different application requirements.

CCEWOOL® Ceramic Fiber bulk specialized for vacuum formed shapes is packed with vacuumed plastic bags and then packed securely on pallets. This packaging method not only protects product from damage but also greatly saves space.

Reach Registration Certificate will be provided as requested for each shipment.

### Characteristics

Unlubricated;

Low heat capacity and low thermal conductivity;

Excellent chemical stability;

Superior thermal stability, resistant to powdering at high temperatures.

### Application:



The best product for making vacuumed formed shapes.

**TDS**

<b>CCEWOOL® Ceramic Fiber bulk specialized for vacuum formed shapes</b>			
Classification Temperature	1260°C (2300°F)	1430°C (2600°F)	
Color	White	White	
Fiber Diameter (µm)	2-4	2-4	
Shot Content (%)	≤15	≤12	
Chemical Composition (%)	Al <sub>2</sub> O <sub>3</sub>	≥43	≥35
	SiO <sub>2</sub>	≥54	≥49
	ZrO <sub>2</sub>	-	≥15
	Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub> +ZrO <sub>2</sub>	-	≥99
Packing		Vacuumed plastic bag+pallet.	

**CCEWOOL® Ceramic Fiber Bulk for Textile**



Temperature degree: 1260°C (2300°F)

CCEWOOL® Ceramic Fiber Bulk for Textile is made from standard refractory ceramic fiber bulk through a further shot-removal process to deliver uniform diameter and high spinnability of fiber cotton, which is one of ideal raw material for the production of textiles.

**Characteristics:**

- Low heat capacity and low thermal conductivity;
- Excellent chemical stability;
- Excellent thermal stability, resistance to pulverization at high temperature;
- With no binders or corrosive substances;
- Excellent sound absorption.

**Application:**

Raw material of refractory ceramic fiber textile(yarn, cloth, tape, rope)

**TDS**

<b>CCEWOOL® Ceramic Fiber Bulk for Textile</b>	
Classification Temperature (°C)	1260
Fiber Diameter(µm)	3-5
Chemical Composition(%)	

Al2O3	≥43
SiO2	≥54
ZrO2	-
Color	White
Shot Content(%)	≤15
Packing	Braided Bag/ Carton

## CCEWOOL® Ceramic Fiber Friction Bulk



Temperature degree: 1260°C (2300°F)

CCEWOOL® Ceramic Fiber Friction Bulk is a combination of refractory ceramic fibers and binding agents, which are designed to improve its characteristics. This type of friction material is manufactured by blending refractory ceramic fibers with organic and inorganic binders. The production process involves mixing, molding, forming, curing, and sintering.

The final result is a material that is capable of withstanding extremely high temperatures and pressure without losing its functionality. It is used extensively in brake systems, clutches, and other friction applications due to its excellent frictional performance, wear resistance, and low dust emissions.

### Characteristics:

1. High heat resistance: Refractory ceramic fiber friction materials can withstand temperatures up to 1200°C, making it an ideal material for use in high-temperature applications.
2. Low wear rates: This material has excellent wear resistance, which makes it highly suitable for use in applications that require long-lasting and durable materials.
3. Low noise: Refractory ceramic fiber friction material is virtually silent during operation, making it an ideal choice for reducing noise and vibration levels.
4. Low dust emissions: These materials are designed to generate low levels of dust during operation, reducing exposure to harmful particles.
5. High chemical resistance: Refractory ceramic fiber friction material is highly resistant to chemical corrosion, ensuring that it can work effectively in harsh environments.

### Application:

1. Automotive brakes: Refractory ceramic fiber friction material is widely used in automotive brake systems due to its excellent performance and durability. It offers smoother operation, lower noise levels, and reduced wear and tear compared to other friction materials.

2. Industrial clutches: These materials are highly preferred in industrial clutch applications due to their high resistance to heat and wear. They offer excellent frictional performance, reducing slippage during high-demand operations.

3. Construction machinery: Refractory ceramic fiber friction material is widely used in construction machinery such as cranes and excavators because they can withstand high loads and stresses.

**TDS**

<b>CCEWOOL® Ceramic Fiber Friction Bulk</b>	
Classification Temperature (°C)	1260
Operation Temp(°C)	≥1000
Fiber Diameter(μm)	2-4
Chemical Composition(%)	
Al2O3	≥45
SiO2+Al2O3	≥97
ZrO2	-
Color	white or grayish-white
Shot Content(%)	≤3
Packing	Braided Bag

**CCEWOOL® Polycrystalline Wool Fiber Bulk**



Temperature Grade: 1600°C (2912°F)

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

CCEWOOL® Polycrystalline Wool Fiber Bulk is made from polycrystalline mullite fibers. It can withstand a continuous operating temperature of up to 1540°C (2800°F) with minimal shot content. This fiber exhibits excellent thermal stability and is suitable for high-temperature insulation applications.

CCEWOOL® Polycrystalline Wool Fiber Bulk serves

as a raw material for the production of polycrystalline fiber blankets, boards, papers, and other products.

**Characteristics:**

- Excellent thermal shock resistance
- Excellent chemical stability
- High-temperature stability
- Low thermal conductivity
- Low shot content



**Application:**

Raw material for finished alumina fiber products

Insulating fill for various industrial furnaces

High-temperature seals, gaskets and coatings

Ladle cover infill

Aerospace industry

**TDS**

<b>CCEWOOL® Polycrystalline Wool Fiber Bulk</b>	
Classification Temperature (°C)	1600
Continuous Temperature Use Limit (°C)	1500
Chemical Composition(%)	
Al <sub>2</sub> O <sub>3</sub>	71-73
SiO <sub>2</sub>	27-29
Leachable Chlorides	Trace
Color	White
Shot Content (%)	≤1
Fiber Diameter (um)	3-6
Fiber Length (mm)	≥100

