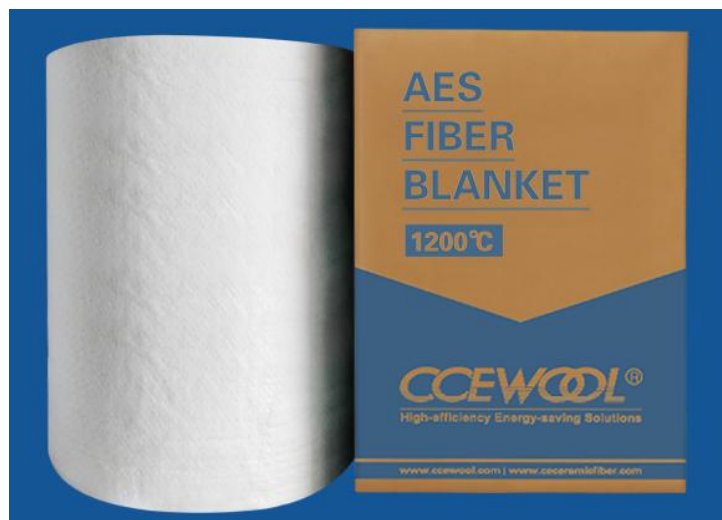


CCEWOOL® Bio Soluble Fiber Blanket



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

Chemical Composition: Silicon, Calcium,
Magnesium (AES)

CCEWOOL® Bio Soluble Fiber Blanket (Low Biopersistent Fiber Blanket) is made from alkaline earth silicate (AES) fibers, a calcium-magnesium-based bio-soluble fiber material. These fibers have increased solubility in physiological fluids and are developed as an alternative to conventional aluminosilicate

ceramic fibers. CCEWOOL® Bio Soluble Fiber Blanket has undergone solubility testing by the Fraunhofer Institute and complies with relevant GHS and REACH requirements, without requiring additional carcinogenic hazard labeling where applicable.

The product is manufactured from our own spun bio-soluble fiber using CCEWOOL®'s self-developed double-sided internal needle-punching process. It features a uniform fiber structure and low dust content, with no binders or lubricants added, so it produces no smoke or odor during initial heating. The fibers remain soft and flexible at elevated temperatures while maintaining stable thermal insulation performance and good mechanical strength.

With its stable fiber structure, low dust content, and good consistency, CCEWOOL® Bio Soluble Fiber Blanket is also well suited for Fabrication processing. It can be further processed into custom-shaped components, modules, composite insulation structures, and customized high-temperature parts, helping meet the requirements of complex equipment and integrated insulation systems for both processing performance and application safety.

CCEWOOL® Bio Soluble Fiber Blanket is available in various thicknesses and densities and is widely used in industrial furnace linings, heating equipment, pipelines, and heat-treatment systems, providing stable, clean, and reliable high-temperature insulation.

Characteristics:

Bio-soluble fiber;
Fully inorganic system;
Excellent thermal shock resistance;
Low thermal conductivity;
Infrared opacity for stable high-temperature insulation;
Low linear shrinkage;
Low heat capacity and low heat storage;
High tensile strength;
High purity and chemical corrosion resistance;
Flexible fibers with good resistance to mechanical damage;
Lightweight, soft, and easy to install;
Good sound absorption.

Applications:

Industrial furnace, heating furnace, and process furnace linings;
Boiler and waste-heat boiler pipe insulation;
Industrial and commercial chimney, flue, and duct insulation;
External wrapping insulation for pipelines and equipment;
Backup insulation for kilns, furnaces, and holding pits;
Modular insulation systems and expansion joint filling;
Fire-protection structures, including fire walls, fire doors, fire-rated ceilings, and fire barriers;
Fire-resistant ducts and smoke-control systems;
Thermal shields for vehicle exhaust systems;
Thermal protection for cable trays and electrical equipment;
Insulation for thermal storage heaters and heating equipment;
Insulation for auxiliary components in metal and glass industries, such as covers and vessel lids;
Thermal insulation and stress control during welding and heat treatment;
Thermal insulation and protection in consumer heat-resistant products.

TDS

CCEWOOL® Bio Soluble Fiber Blanket

Classification Temperature	1200°C(2192°F)		1300°C(2372°F)	
Chemical Composition (%)				
SiO2	62-68		≥70	
CaO	26-32		-	
MgO	4-7		-	
CaO+MgO	-		≥20	
Color	Light Bluish		Light Bluish	
Shot Content (%)	≤12		≤12	
Density (kg/m³)	96(6lb/ft³)	128(8lb/ft³)	96(6lb/ft³)	128(8lb/ft³)
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

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	

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