

CCEWOOL® Polycrystalline Wool Bulk



Classification Temperature: 1600°C (2912°F)

Chemical Composition: Alumina, Silica

CCEWOOL® Polycrystalline Wool Bulk (PCW Bulk Fiber) is developed for high-temperature, chemically aggressive, and long-term operating conditions. It can maintain stable structural and thermal performance at continuous service temperatures up to 1540°C (2800°F), making it a high-temperature upgrade from conventional ceramic fiber for more demanding applications.

As a base fiber material, CCEWOOL® Polycrystalline Wool Bulk offers excellent processing adaptability. It can be needled into PCW blankets, formed into boards, processed into fiber paper and shaped products, or spun into yarn for high-temperature textiles. Its loose and fluffy fiber structure also makes it suitable for use with liquid binders in spray-applied insulation, pumpable insulation materials, sealing fillers, and refractory coating systems.

With excellent high-temperature stability, low thermal conductivity, low heat capacity, and strong thermal shock resistance, CCEWOOL® Polycrystalline Wool Bulk is widely used in high-temperature furnace linings, expansion joints, sealing systems, and insulation structures requiring chemical stability and long-term dimensional reliability.

Characteristics:

Excellent thermal shock resistance;

Excellent chemical stability;

High-temperature stability;

Low thermal conductivity;

Extremely low shot content;

Low linear shrinkage;

High resilience.

Applications:

Raw material for polycrystalline wool products;
Loose-fill insulation for industrial furnaces;
High-temperature seals, gaskets, and coatings;
Ladle cover filling;
Chimney filling;
Fire door filling;
Kiln car filling;
Expansion joint filling;
Aerospace applications.

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