CCEWOOL Thermomax Inc.
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# CCEWOOL® Ultra-thin Polycrystalline Wool Fiber Blanket 3mm


Temperature Grade 1600℃ (2912℉)

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® 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.

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**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℃(2912℉) |
| Continuous Temperature Use Limit | 1500℃(2732℉) |
| Chemical Composition (%) | |
| Al2O3 (%) | 71-73 |
| SiO2 (%) | 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℃ x24h<1.0 |
| | 1600℃ x24h<1.0 |
| Thermal Conductivity (W/m-K) (96kg/m3) | |
| 600℃ | 0.067 |
| 1000℃ | 0.129 |
| 1200℃ | 0.170 |

| Specifications | |
|---|---|
| Thickness | 3mm (0.12") |
| Width | 610mm (24") |
| Length | 7200mm, 14400mm |
| Density | 96kg/m3 (6lb/ft3) |