

## DAKEN AES Fiber Blanket



### Typical Applications

- Fire protection and insulation jackets;
- Industrial furnaces and reformers;
- Offshore and marine PFP systems;
- Expansion joints and gaskets;
- Kiln car linings, heat shields, and pipe wrap;

### Introduction

Alkaline Earth Silicate (AES) Fiber is a high-performance insulation material designed for superior thermal efficiency, water repellent, durability, and environmental safety. DAKEN AES Blanket is manufactured by high pure raw materials using soluble fiber manufacturing technology, it combines low thermal conductivity, excellent flexibility, and bio-soluble characteristics for a sustainable and reliable insulation solution. Available in a variety of density and thickness combinations, DAKEN AES Blankets provide effective solutions in a variety of high temperature applications.

### Key Advantages

- Excellent thermal insulation performance;
- Excellent water repellent;
- Soft and elastic;
- Excellent sound absorption performance;
- Excellent thermal shock resistance;
- Excellent tear resistance and stability;
- Compliant with EC 1272/2008, it secures EU market access and safety;

## Typical Parameters

| Description                           | DAKENWOOL1100 BLANKET |      |      | DAKENWOOL1200 BLANKET |      | DAKENWOOL1300 BLANKET |      |
|---------------------------------------|-----------------------|------|------|-----------------------|------|-----------------------|------|
| Classification Temperature(°C)        | 1100                  |      |      | 1200                  |      | 1300                  |      |
| Color                                 | White                 |      |      | White                 |      | White                 |      |
| Chemical Composition(%)               |                       |      |      |                       |      |                       |      |
| SiO <sub>2</sub>                      | 62-68                 |      |      | 62-68                 |      | ≥70                   |      |
| CaO                                   | 26-32                 |      |      | 26-32                 |      | -                     |      |
| MgO                                   | 4-7                   |      |      | 4-7                   |      | -                     |      |
| CaO+MgO                               | -                     |      |      | -                     |      | ≥20                   |      |
| Shot Content(%)                       | ≤12                   |      |      | ≤5                    |      | ≤12                   |      |
| Water Absorption (% by weight)        | ≤5                    |      |      | ≤5                    |      | ≤5                    |      |
| Density (kg/m <sup>3</sup> )          | 64                    | 96   | 128  | 96                    | 128  | 96                    | 128  |
| Tensile Strength (kPa)                | 30                    | 50   | 70   | 50                    | 80   | 50                    | 70   |
| Thermal Conductivity(W/m K,ASTM C201) |                       |      |      |                       |      |                       |      |
| 200°C                                 | 0.06                  | 0.05 | 0.05 | 0.06                  | 0.05 | 0.05                  | 0.04 |
| 400°C                                 | 0.12                  | 0.11 | 0.10 | 0.10                  | 0.09 | 0.10                  | 0.08 |
| 600°C                                 | 0.21                  | 0.18 | 0.15 | 0.15                  | 0.12 | 0.18                  | 0.14 |
| 800°C                                 | 0.32                  | 0.27 | 0.23 | 0.22                  | 0.18 | 0.30                  | 0.22 |
| 1000°C                                | -                     | -    | -    | 0.30                  | 0.26 | 0.46                  | 0.33 |
| 1200°C                                | -                     | -    | -    | -                     | -    | 0.68                  | 0.46 |

The data shown are typical average results of tests under standard procedures and are subject to variation. Results should not be used for specification purposes or creating any contractual obligation. For more information on the safety application or materials, please refer to the work practices and material safety data sheet.