



### 4AC.018 Felt – Pure silica - Untreated

#### Overview

All our pure silica fibre products have a proportion of silica greater than 99.95 %. They are made of continuous, homogeneous and non-porous fibres. Silica is not only one of the most effective high-temperature materials but is also among the most reliable and ecological on the market. Pure silica fibre felts are composed of silica fibre combined with polyvinyl alcohol. They can be used at temperatures up to 1,200 °C. There is no shrinkage even with operating temperatures up to 1,000 °C and they maintain very low thermal conductivity as well as excellent mechanical properties.

#### Technical Data

| Properties  |           | Unit | Value                      |
|-------------|-----------|------|----------------------------|
| Material    |           |      | Silicate                   |
| Composition |           | %    | SiO <sub>2</sub> : > 99.95 |
| Temperature | Operating | °C   | 1,000                      |
|             | Peak      |      | 1,200                      |

#### General Data

| Material | Thermal resistivity | Mechanical strength | Chemical resistance                   |
|----------|---------------------|---------------------|---------------------------------------|
| Silicate | ★★★★★               | ★★★★☆               | ★★★★☆<br>Except for hydrofluoric acid |

#### Applications

- Insulation of industrial furnace
- Catalyst support for heating systems
- Alternative to asbestos and ceramic fibres
- Thermal insulation for the manufacture of optical fibre
- Insulation of engines in aeronautics



### Available felts

| Basis weight (g/m <sup>2</sup> ) | Density (kg/m <sup>3</sup> ) | 10 – 20 (Treatment: PVA) | 130        |
|----------------------------------|------------------------------|--------------------------|------------|
|                                  |                              | 65                       | On request |
| 80                               |                              | 1TEX002717               |            |
| 100                              |                              | On request               |            |
| 200                              |                              |                          | On request |
| 500                              |                              |                          | 1TEX002794 |
| 1,000                            |                              |                          | 1TEX002796 |

**The felts are available untreated, calcined or with PVA as binder.**

Calcination: The calcination process removes the fibres on the surface, thus improving their performance and their resistance to heat. This treatment prevents the initial emissions of smoke.

PVA: Polyvinyl acetate (PVA) is a thermoplastic polymer made from vinyl acetate homopolymers, that offers great resistance to alkaline medium.

*The physical properties in this documentation are provided for informational purposes only and do not constitute a contractual commitment. Please contact our technical service if you require any additional information.*