

Papers and felts based on aluminium silicate wool

SILCAFELT

130S, 140Z

SILCAFELT 130S is a flexible fibre paper with uniform structure and smooth surface.

SILCAFELT 140Z is a flexible fibre felt with high tensile strength.

SILCAFELT - products are made of aluminium silicate wool and special organic binders. The bonding agents escape at temperatures in excess of approximate 200 °C. These products are characterized by their high resilience, good temperature resistance and low thermal conductivity.

SILCAFELT is easy to work, cut and punch. Typical fields of application include high temperature gaskets, back-up insulations for the transport of liquid metals as well as expansion joints in refractory construction.

Note:

Our EC safety data sheet will inform you about the protective measures to be taken when handling and using aluminium silicate wool as well as the health risks.

SPECIAL FEATURES

- resistant to high temperatures
- low thermal conductivity
- easy to machine
- good insulating properties



SILCAFELT

130S, 140Z

| SILCAFELT | | Unit | 130S | 140Z |
|---|---|-------------------|------------------|--------------|
| Upper application limit temperature | | °C | 1,250 | 1,400 |
| Melting point | | °C | 1,800 | 1,740 |
| Colour | | | white | white, beige |
| Bulk density | | kg/m ³ | 220 - 240 | 270 |
| Breaking stress | | kPa | > 350 | > 50 |
| Shrinkage after 24 h | 1,250 °C | % | < 4 | - |
| | 1,400 °C | | - | < 4 |
| Thermal conductivity λ at t_m | 600 °C | W/(m K) | 0.08 | - |
| | 800 °C | | 0.11 | 0.15 |
| | 1,000 °C | | 0.17 | 0.21 |
| | 1,200 °C | | - | 0.29 |
| Chemical reference analysis | SiO ₂ | % | 50 - 54 | 52 - 56 |
| | Al ₂ O ₃ | | 46 - 50 | 28 - 32 |
| | ZrO ₂ | | - | 14 - 18 |
| | Fe ₂ O ₃ + TiO ₂ | | < 0.2 | - |
| | Alkalis | | < 0.25 | < 0.25 |
| Annealing loss | | % | < 12 | < 10 |
| Dimensions | | | | |
| Standard sizes | Delivery form | | Rolls | Boards |
| | Length | mm | 10,000 | 1,250 |
| | Width | mm | 610/1,000 | 1,000 |
| | Thickness | mm | 1/2/3/4/5/6/8/10 | 6/9/12/18/25 |

The properties mentioned are typical values obtained according to the listed methods. Product variations have to be taken into account. The data do not represent guaranteed properties and cannot be used for any warranty claim. Data are subject to technical modifications.