

Keralpor 99

Alumina 99.5 % porous

Applications

- setter for MIM - production
- setter for ceramic or dental ceramic production
- gas-permeable membranes for sensors

Advantages

- dust-free / particle-free surface
- homogeneous pore size distribution
- good mechanical strength compared to the high porosity
- material can be cut by laser or waterjet
- very good planarity and surface quality
- big customized dimensions of the setter possible
- gases and liquids can freely diffuse through the sintered plate



| Typical characteristics | Unit | Value |
|----------------------------------|-------------------|-------------------------------------|
| Colour | | white |
| Gross density | g/cm ³ | 2.56 |
| Surface roughness R _a | µm | 0.7 |
| Bending strength | MPa | 60 |
| Camber | % | < 0.3 |
| Porosity | Vol.% | 36 - 38 |
| Average pore size | µm | 1 |
| Dimensions | mm | 10 x 10 up to 310 x 310 |
| Standard thicknesses | mm | 1.0 / 1.5 / 2.0 |
| Main components | % | 99.5 Al ₂ O ₃ |
| Maximum operation temperature | T _{max} | 1500°C |

! All sizes are available with a thickness of 1.0 mm / 1.5 mm / 2.0 mm!

Please ask for your tailormade dimensions and we will create your Keralpor 99 quickly.

Due to the low heat capacity, the demand of energy for the kiln is lower, compared to conventional setter and kiln furniture. The demand of time and energy for heating up and cooling down the kiln furniture is significantly reduced by using KERAFOF® setter plates.

Our customers use these setters for sintering Low Temperature Co-fired Ceramics (LTCC), Solid Oxide Fuel Cells, dental ceramics and for debinding and sintering stainless steel Metal Injection Moulded (MIM) components. The high planarity of Keralpor 99 leads to accurate sinter results. Due to the high porosity of the alumina matrix the gases can diffuse through the setter during the debinding and sintering process easily.

The parts do not adhere to the setter during the debinding process. Keralpor 99 can be used best as a setter plate on your silicon carbide, mullite, korundum, molybdenum or grafite kiln-furniture.



Note

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. KERAFOLE is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. All specifications are subject to change without notice. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded. In case KERAFOLE would be nevertheless held liable, on whatever legal ground, KERAFOLE's liability will in no event exceed the amount of the concerned delivery. All KERAFOLE products are sold pursuant to the KERAFOLE's Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.

08-2024