

Keralpor 99

Alumina 99.5 % porous



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 KERAFOL® 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 graphite kiln-furniture.

✓ All sizes are available with a thickness of **1.0 / 1.5!**

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

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
Main components	%	99.5 Al ₂ O ₃
Maximum operation temperature	T _{max}	1500°C

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

Applications

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

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. KERAFOL® 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 KERAFOL® would be nevertheless held liable, on whatever legal ground, KERAFOL®'s liability will in no event exceed the amount of the concerned delivery. All KERAFOL® products are sold pursuant to the Kerafol's Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.