

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 / 2.0 mm!**

Please ask for you 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 350 x 350
Standard thicknesses	mm	1.0 / 1.5 / 2.0
Compounding	%	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

Standard dimensions

DIN A5 (148 x 210 mm ²)
100 x 100 mm ²
150 x 150 mm ²
168 x 168 mm ²

Important notes

The data presented in this leaflet are in accordance with the present state of our knowledge. All statements, technical information and recommendations herein are based on tests we believe to be reliable. The customer is thereby not absolved from carefully checking all supplies immediately on receipt. The recommendations made in this catalogue should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection there with. We reserve the right to alter product constants within the scope of technical process or new developments. The recommendations do not absolve the customer from the obligation of investigating the possibility of infringement of third parties right and, if necessary, clarifying the position. Sellers' and manufacturer' only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable either in tort or contract for any loss or damage, direct or incidental, or consequential, including loss of profits or revenue arising out of the use or the inability to use a product. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.

30-06-2014