

# Keralpor 99

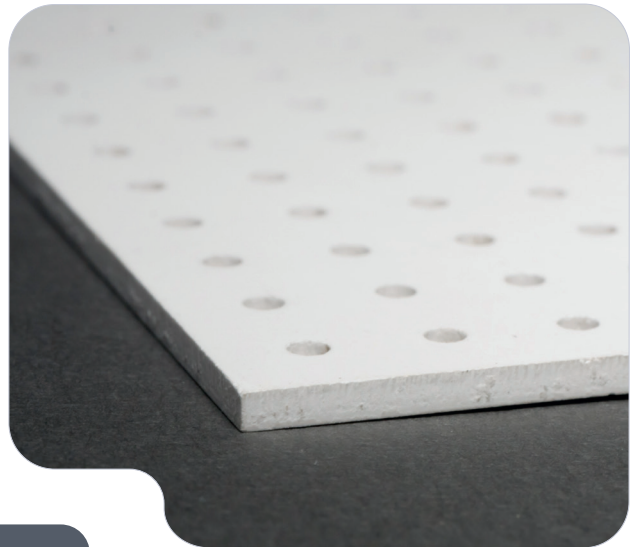
## Alumina 99.5 % porous

### 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 <sup>3</sup>	2.56
Surface roughness R <sub>a</sub>	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 <sub>2</sub> O <sub>3</sub>
Maximum operation temperature	T <sub>max</sub>	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 graphite kiln-furniture.

## Note

### Disclaimer of Warranties and Limitation of Liability

The specifications provided in this data sheet do not constitute a guarantee or warranty of specific product properties („quality guarantee“). These specifications are derived from our standardized testing procedures conducted under controlled laboratory conditions and are intended to describe the typical properties of the products as expected under standard applications. Variations may occur depending on the specific application. Accordingly, it is the responsibility of the customer to test and evaluate the products for their intended use, and adjustments to the application may be required.

The customer assumes full responsibility for the safety and functionality of their applications in which these products are integrated. Appropriate safety measures must be implemented to prevent bodily injury, fire, or other damages resulting from product defects. The customer is also responsible for ensuring that the design of their application complies with all applicable laws, regulations, codes, and standards. Unless expressly authorized by us in writing, our products must not be used in any application where product failure or the consequences thereof could reasonably be expected to result in personal injury or harm. We make no representations, warranties, or assurances regarding the accuracy, completeness, or suitability of the information contained herein, including, without limitation, any warranty of non-infringement of third-party intellectual property rights.

We disclaim all liability arising from the application or use of the products described in this document. This document does not grant any license, express or implied, under any patents, copyrights, trade secrets, or other intellectual property rights, whether ours or those of third parties. Furthermore, we make no warranty or guarantee against potential infringement of third-party intellectual property rights arising from the use or application of our products.

Products may contain substances subject to regulatory labeling requirements; such information is provided in the corresponding safety data sheets. This document supersedes all prior information and may be updated or replaced at our discretion. We reserve the right to make changes to this document without notice.

**12-2024**