

## Keralpor 99 Z

Alumina setter + Zirconia coating



Keralpor 99 Z is required for materials reacting with  $\text{Al}_2\text{O}_3$  and when a high evenness and purity is desired. The zirconia coating of Keralpor 99 Z prevents a reaction between  $\text{Al}_2\text{O}_3$  and the sintered part. Additionally, due to the porous structure of the setter and coating, an adherence of the overlying ware can be avoided. This setter is preferably used to sinter Solid Oxide Cells.

✓ All sizes are available with a thickness of **2.0 mm!**

Please ask for your tailor-made dimensions and we will create your Keralpor 99 Z quickly.

Typical characteristics	Unit	Value
Colour of alumina basic setter	-	white
Gross density	$\text{g/cm}^3$	2.56
Surface roughness $R_a$	$\mu\text{m}$	< 1
Bending strength	MPa	60
Camber	%	< 0.3
Porosity	Vol.%	36 - 38
Average pore size	$\mu\text{m}$	1
Standard dimensions	mm	100 x 100 / 150 x 150 / 168 x 168
Standard thickness	mm	2.0
Compounding	%	99.5 $\text{Al}_2\text{O}_3$
Zirconia coating (one-sided)		3mol.% Yttrium stabilized zirconia
Colour of zirconia coating	-	beige
Maximum operation temperature	$T_{\text{max}}$	1400°C

## Advantages

- cheap setter for high-quality ceramic and metal injection moulding (MIM) components
- gases can freely diffuse through the setter and coating
- customized dimensions of the setter are possible
- good mechanical strength compared to the high open porosity
- very good flatness and surface quality

## Applications

- setter for dental zirconia and jewelry zirconia ceramics
- setter for Solid Oxide Fuel Cells (SOFC)
- setter for example Ti - metal injection moulding (MIM) materials

