

Zirconia layered alumina setters

Keralpor 99 Z

Setter plates / kiln furniture

Porous alumina ceramic setters layered single - sided with zirconia

ADVANTAGES:

- When using Keralpor as sintering base or sintering support its high planarity makes it possible to achieve very accurate sinter results.
- Due to the porosity of the zirconia layered alumina ceramic gases can diffuse by the material.
- When sintering products contain high amounts of binder, the debinding gases can be removed well.
- Due to Keralpors small thickness and gross density the weight of the individual plates is very light. Thereby the kiln furniture setup is not additionally strained.
- By the porous structure of Keralpor adherences of the overlying green ware can be avoided.
- The zirconia layer prevents the anode-material, which contents often NiO-YSZ from reactions with the Al₂O₃. As an effect the capacity of the MEA keeps well-preserved

APPLICATIONS:

Setter-plates for sintering high efficient MEAs or electrolytes for SOFC applications.

CHARACTERISTICS:

Characteristics	Unit	Keralpor 99 Z
Colour (layered side)		white, yellowish
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Gross density	g/cm ³	2.56
Porosity	Vol%	40
Surface roughness R _{max} (upper side)	µm	12
Surface roughness R _a (upper side)	µm	0.7
Surface roughness R _{max} (lower side) (layered side)	µm	38
Surface roughness R _a (lower side) (layered side)	µm	5
Bending strength DIN 52 292	N/mm ²	about 60

