

Tape development & Production

With long experience in developing and producing ceramic tapes of different materials for various applications, **we offer:**

- customized solutions
- consulting & development
- production services from lab scale to mass production

Research & Development

In order to offer our customer competent customized advice and individual solutions, our engineers and staff are working in laboratories with modern testing and measuring equipment. **We offer:**

- optimization of existing concepts
- development of new innovative products

You benefit from:

- developments without own fixed costs
- quick and uncomplicated procedures from development to production
- from a certified partner with high quality standards

We look forward to your challenge!

Kerafol® - with passion for tapes!

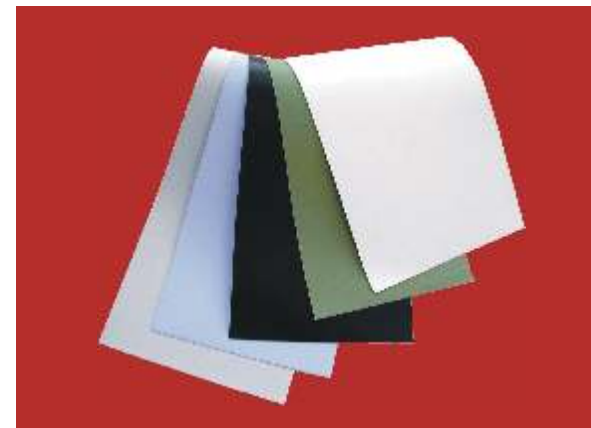
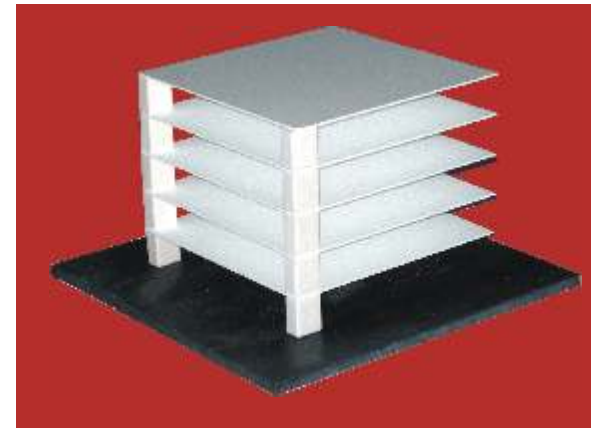
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CERAMIC
for high-performance products



KERALPOR

KERAL 99

KERAPROTEC

PSZ Substrates

KERAFOL® - Keramische Folien GmbH, founded in 1985 and located in Eschenbach, Bavaria, is one of the worldwide leaders in manufacturing ceramic tapes and substrates of different oxide and non-oxide materials.



KERAFOL®
KERAMISCHE FOLIEN GMBH

Innovation in Environmental
Technology and Power Generation

Ceramic for high-performance products

Kerafol - Ceramic Tapes

Kerafol Keramische Folien GmbH located in Eschenbach, Germany is one of the leading specialists for the development and production of ceramic tapes and substrates. We offer:

Alumina:

- Keralpor products: porous setter plates with excellent material characteristics and functionality
- Keral 99: dense alumina substrates with a content of 99,7% Al_2O_3

Zirconia:

- Keraprotec: partially stabilized ZrO_2 for wear-resistance applications
- PSZ: with 5 Mol.% stabilized ZrO_2 with very fine grain structure suitable for thin film applications

Alumina

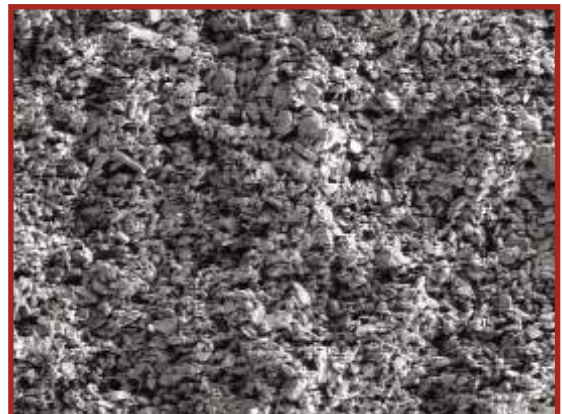
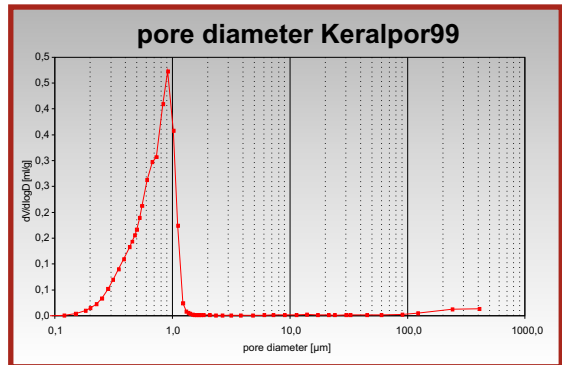
Keralpor setter plates:

Setter plates for high demands on geometrie and material quality for your components.

Depending on your requirements we can offer our high-purity Keralpor 99 with a Al_2O_3 - content of 99.5% and a porosity of 36-38 vol% or for increased demands on strength and thermal shock resistance our Keralpor 99 S consisting of 92% Al_2O_3 and 8% ZrO_2 .

Advantages:

- good to very good TWB (according to type)
- small weight = small furnace ballast
- good compatibility with other setter plates from e.g. mullite, corundum, RSiC , CFC and molybdenum
- high porosity with small pores
- absorption of the binder into the pores during the debinding
- avoiding of adhesion to the component
- homogeneous shrinking through unimpeded shrinkage
- inert material alumina or alumina + zirconia
- available formats up to feed size of 330x330 mm
- handling/assembly with robots possible!



FESEM Keralpor 99

Zirconia

Keraprotec:

Substrates and planar components of zirconia oxide for wear-resistant applications.

Due to the excellent material properties and characteristics of the surface, KERAPROTEC is characterized by a high wear resistance and very good gliding properties.

For the use in applications where metal and plastic are overstrained. For this reason it is used e.g. as protection for sensor heads, as gliding auxiliary or similar applications.

Using our tape technology, we can produce very precise, thin layer thicknesses. Your requested format can be cut with laser.

Characteristics:

- high corrosion resistance
- high abrasion resistance
- very good gliding properties
- good electrical isolation
- high planarity
- low thermal conductivity
- very good mechanical strength
- cuttable with laser
- small thicknesses

PSZ Ceramic:

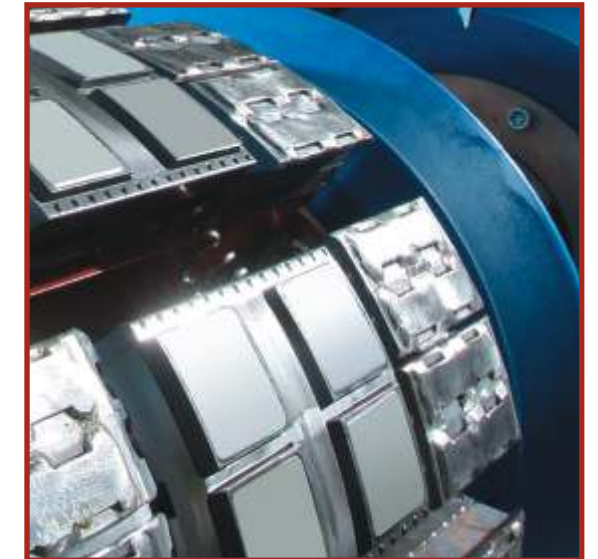
dense zirconium oxide partially stabilized with 5 Mol.% yttria for applications in the sensor technology. Due to its high pore fineness and excellent surface characteristics on the sintered component, PSZ is especially suitable for thin film and sensor applications.

Standard formats:

50,8 x 50,8 mm (2"x2")
101,6 x 101,6 mm (4"x4")

Standard thicknesses:

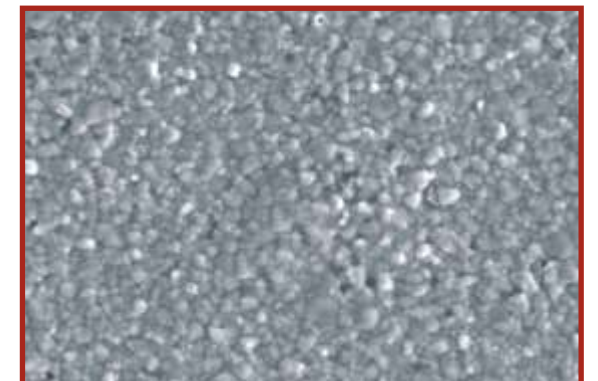
0,25 mm; 0,38 mm; 0,5 mm +/-10%



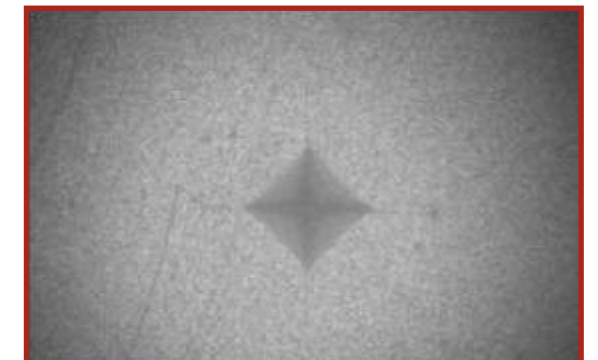
Fa. Rosen



oversize



PSZ-microstructure



Vickers