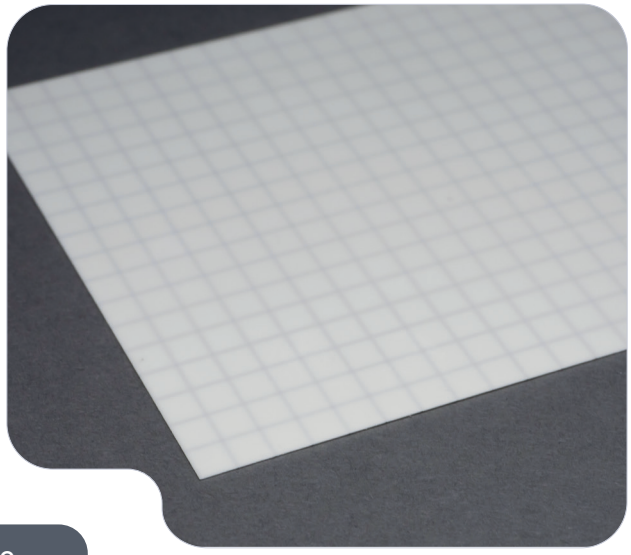
# Keral 99
## Alumina content ≥ 99.6%

## Applications

- thickfilm substrate material
- sensor protection plate
- electrical insulator

## Advantages

- fine-grained homogeneous grain structure
- very good electrical insulating ability
- good mechanical strength
- very good thermal conductivity
- cuttable with laser or waver saw
- good evenness



| Typical characteristics | Unit | Value |
|---|---|---|
| Colour | | white |
| Gross density | g/cm³ | 3.88 |
| Surface roughness $R_a$ | µm | 0.2 |
| Bending strength | MPa | 500 |
| Evenness | µm | 50 |
| Dielectric strenght at 20°C | kV/mm | 17 |
| Thermal expansion coefficient 20 - 600°C | $10^{-6}K^{-1}$ | ~ 7 |
| Thermal conductivity | W/mK | 30 |
| Standard dimensions | mm | 101.6 x101.6 and 50.8 x 50.8 |
| Thickness | mm | 0.25 up to 0.5 |
| Structure | | dense |
| Main components | % | ≥ 99.6% $Al_2O_3$ |

Keral 99 is a high alumina substrate material with ≥ 99.6% purity. Due to the high degree of purity and the fine grain structure, it has a very high thermal conductivity up to 30 W / mK. The dielectric strength is the highest of KERAFOL® ´s ceramic substrate materials.

We cut the material according to your wishes!
Please send in your CAD data.

## 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 there of 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.

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