

Keralpor Ultra

Ceramic Setter Plates

PRELIMINARY DATA SHEET

Applications

- Metal injection molding (MIM) and ceramic injection molding (CIM) during debinding and sintering of complex shapes
- Additive manufacturing (AM), providing support and sintering of 3D-printed ceramic and metal parts
- Low-temperature and high-temperature co-fired ceramics (LTCC & HTCC), ensuring smooth surfaces and precise layer alignment
- Dental ceramics, such as crowns, bridges, and other dental components Diaphragma for gas sensor

Advantages

- Very high mechanical strength
- Lower energy use from lighter plates
- Fast processing with high thermal shock resistance
- High yield, minimal distortion
- Smooth, uniform surfaces
- Chemically and thermally stable (>99% Al₂O₃)
- Single-plate use reduces tooling



Typical characteristics	Unit	Value
Colour		white
Density	g/cm ³	2.7
Bending strength	MPa	> 90
Main components	%	> 99 Al ₂ O ₃
Surface roughness	µm	0.4
Camber longest edge	%	< 0.3
Porosity	%	32 - 35
Thickness	mm	1.5
Max. operation temperatur	°C	1500
Surface roughness R _a	Ra	0.4

The Keralpor Ultra Ceramic Setter Plates provide distortion-free, high-precision results for MIM/CIM, additive manufacturing, co-fired ceramics, dental applications, and gas sensor diaphragms. High strength and >99% Al₂O₃ ensure smooth surfaces, protect sensitive materials, and simplify production while maximizing yield.

- ! 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 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.

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