

Technical Information

Keraflex® - Porcelain tape

Die Porzellanfolie



MATERIAL:

- Flexible tape based on ceramic raw materials and an organic binding matrix.

ADVANTAGES:

- Because of its high flexibility and the contained binder components the tape offers new possibilities in the ceramic treatment and shaping.
- There are plenty of possibilities in treatment and shaping such as punching, embossing, cutting, folding, bending, laminating and glazing.

APPLICATIONS:

- Within the artistic range as well as in the design **KERAFLEX®** energizes creativity due to its flexible characteristics. It is used for decoration, lightning elements, furniture and representing art.
- In the sintered condition **KERAFLEX®** stands for an optical very delightful translucency that offers free space for new ideas.
- For the technical range it can be used sintered as electrical insulator, for mechanical processes as composite material component or as dielectric.

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Characteristics	Unit	KERAFLEX substrate
Colour	-	white-translucent
Surface roughness R _a	µm	1.6
Green density	kg/dm ³	2.42 0.1
Water absorbing capacity	%	< 0.1
Bending strength (unglazed)	MPa	23
Thermal conductivity	W/mK	1.5
Dielectric constant ε _r	-	6.0
Dielectric strength	KV/mm	>12
Thermal expansion coefficient	10 ⁻⁶ K ⁻¹	7
Translucency	-	ja
Bending radius	mm	> 4
Firing shrinkage at 1200/1240/1280 °C	%	approx 15/17/18

Characteristics	Unit	KERAFLEX green tape
Colour	-	light beige
Tensile strength at 20°C	N/mm ²	1.35
Solubility	-	slightly resolvable with water
Dielectric strength	kV/mm	approx. 12
Density	kg/dm ³	1.57

KERAFLEX-green tape		
STANDARD-FORMATS	Format DIN A4: Thickness 1,0 mm Thickness 0,5 mm	Format DIN A3: Thickness 1,0 mm Thickness 0,5 mm
	Customized formats are possible as well.	

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Storage:

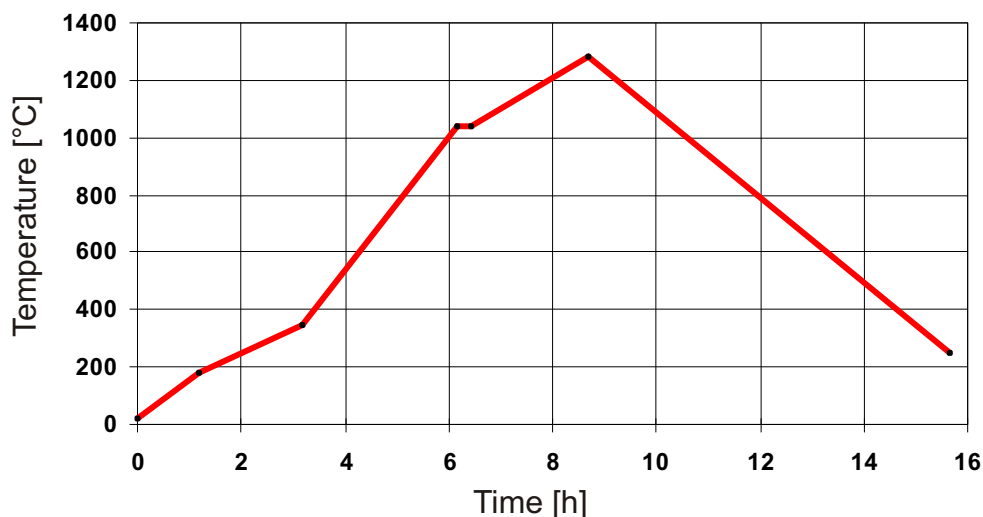
- Always store product in its original packaging
- do not expose to temperatures > 50°C for long periods
- keep away from direct sunlight and humidity
- see **KERAFLEX®** safety data sheet

Handling:

Firing Curve Soft Porcelain

Section	Temperature [°C]	Δt [h]	t [h]	ΔT [K/h]
Start	20	0	0	0
1	180	1.17	1.17	137
2	350	2.00	3.17	85
3	1040	3.00	6.17	230
4	1040	0.25	6.42	0
5	1280	2.25	8.67	107
6	250	7.00	15.7	-147

Firing Curve



Firing is only to be done in closed furnace aggregates with an appropriated exhaust! The prolonged direct proximity to oven is to be avoided during the heating-phase!