

Technical Data Sheet

Zirconia Ceramic

Ideal for cases of

- strong abrasive and impact wear
- any kind of bulk solids
- service temperature up to 1.000°C

Physical Properties

Bulk density	3,4 - 3,5	g/cm ³
Porosity	approx. 3	%
Hardness to Mohs	~ 9	
Compressive strength	400	MPa
Flexural strength	60	MPa
Coefficient of expansion	6,5- 7 x 10 ⁻⁶	1/K
Thermal conductivity	4,2 - 7	W/mK
Max. operating temperature	1.000	°C

Chemical Composition

Components	Mean Values (Weight-%)
ZrO ₂	32 - 33
Al ₂ O ₃	50 - 51
SiO ₂	14 - 16
Others	remainder

Chemical Resistance

Strong resistance to acids, except for hydrofluoric acids; partially resistant to alkaline solutions (loss of the bonding sections).

All values were determined on test bodies and are mean values from standard test methods and therefore do not constitute guaranteed properties for construction items of all kinds, linings etc. in the sense of assured product values; in cases of doubt, pilot trials and/or item tests are recommendable

