

BASIC PROPERTIES

- Impervious material (no porosity)
- Tubes used for high temperature with heavier load
- Strong resistance to oxidation
- Big sizes components available
- Good resistance to acids and strong alkali

APPLICATIONS

Tubes and rollers for furnaces
 Profiled beam and support

MATERIAL		SILICON CARBIDE infiltrated
Chemical Formula		Si SiC
Aspect / color		Grey
Porosity		Impervious
SiC content	%	88-92
Free SiC content	%	08-12
Mechanical		Measuring unit
Young modulus	GPa	370
Mechanical resistance (3 pts flexion) at 20°C	MPa	240
Mechanical resistance (3 pts flexion) at 1000°C	MPa	250-300
Physical		
Maximum temperature use	°c	1350°C
Density	g/cm3	3,1
Water absorption	%	≤0,1
Open porosity	%	0
Dielectrical strength	kV mm-1	
Thermal		
Thermal conductivity at 200°C	W m-1 K-1	100
Thermal conductivity at 500°C	W/m.°K	
Thermal shock resistance	°c	Good
Thermal expansion coefficient	10-6K-1	4,3
Approximative using temperature loaded	°c	1350

*These values are for informational purposes only and do not bind company's responsibility.