**Technical Data Sheet** 

SC-WN Ker 03 TD-Al2O3 E-Rev 03

## **SC-Alumina Ceramics**

valid as of: 01.01.2016

## **Physical Properties**

Bulk density:	3,4	- 3,65	g/cm³
Porosity:	0		%
Hardness to Mohs:	~ 9		
Compressive strength:	>3000		MPa
Flexural strength:	240	- >300	MPa
Coefficient of expansion:	6	- 8x10 <sup>-6</sup>	1/K
Thermal conductivity:	20	- 22	W/mK
Max. operating temperature:	1.550		°C

## **Chemical Composition**

Components	Mean Values (Weight-%)
$Al_2O_3$	>92,00
SiO <sub>2</sub>	2,50
CaO	2,30
MgO	2,80
Fe <sub>2</sub> O <sub>3</sub>	0,06
Na <sub>2</sub> O	0,03
K <sub>2</sub> O	0,01

## **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.

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