

### **BASIC PROPERTIES**

- Most frequently used ceramic material in kiln designs
- Application temperature up to 1400°C
- Refractoriness up to 1300°C
- No reaction with heating elements
- Porous material
- High thermal shock resistance

### **CHEMICAL COMPOSITION**

Alumina 84,10%  
Silicon 14,6%  
Iron oxide 0,56%  
Titanium oxide 0,24%  
Calcium oxide 0,15%

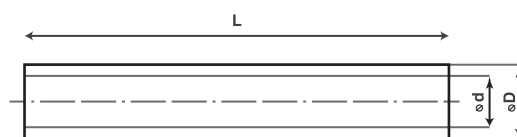
MATERIAL	C530 according to DIN VDE 0335	MULLITE C530
Alumina %		72 - 74 %
Aspect / color		White rough
Porosity		Porous
<b>Mechanical</b>	<b>Measuring unit</b>	
Young modulus	GPa	60
Flexural strength at 20°C (3 points)	MPa	45
<b>Physical</b>		
Max. use temperature in air	°C	1500
Opened porosity	%	27
Density	g/cm <sup>3</sup>	2,4
<b>Electrical</b>		
Electrical resistivity 600°C	Ohm, m	106
<b>Thermal</b>		
Coefficient of thermal expansion from 20°C to 700°C	x10 <sup>-6</sup> K <sup>-1</sup>	5,3
Coefficient of thermal expansion from 20°C to 1000°C	x10 <sup>-6</sup> K <sup>-1</sup>	5,7
Thermal conductivity 200°C	W/m-1 K-1	1,4
Thermal conductivity 20°C	W/m.°K	2
Thermal choc resistance	°C	excellent
Max. use temperature with load	°C	1350

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

Outer Diam. (in mm)	Inner diam. (in mm)	Outer Diam. (in mm)	Inner diam. (in mm)
16	10	130	110
16	12	140	120
20	12	150	130
22	17	160	140
23	17	170	150
26	18	180	160
30	20	190	170
30	25	200	180
35	27	210	190
38	30	220	200
40	20	230	210
40	30	240	220
40	32	250	230
50	40	260	240
60	50	275	250
65	55	280	260
70	60	300	280
75	65	310	290
85	75	320	300
95	80	380	350
100	85	425	400
110	90	480	450
120	100	530	500

**SCERAM** stocks significant quantities of tubes, allowing great responsiveness and quick delivery.

- Standard length on stock: 1000 to 1500 mm (Longer tubes on demand: up to 4000 mm, depending on outer diameter)
- Dimensions not included in the table can be custom made upon request.
- General tolerances are in compliance with DIN 40680 norm.



**SCERAM** provides tubes machining services :

- Cutting to requested length
- Hole drilling
- Outer and inner diameter extremities threading
- Extremities outer and inner diameter grinding
- Half tube longitudinal cutting (on limited length)
- Flanges cementing (with refractory cement)
- Customized tolerances upon request