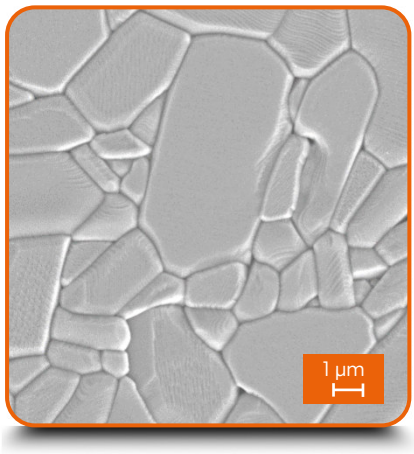
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Material Data Sheet
A997-M

General Information

Name	Alumina
Material Group	C799 Alumina 99,7
Description	High purity alumina



SEM Image: typical microstructure of A997-M

Properties	Value	Unit
Color	white to off-white	
Density	3,91	g/cm³
Bending Strength (3-Point)	385	MPa
Hardness (HV10)	1615	-
Specific Volume Resistance (20°C)	$15{,}1 \cdot 10^{13}$	Ωm
Dielectric Strength (20°C)	14,3	kV/mm
Thermal Conductivity (20°C)	36,5	W/mK
Specific Heat (20°C)	820	J/kgK
Coefficient of Thermal Expansion (30 – 1.000°C)	8,4	10^{-6} K^{-1}
Average Grainsize (d50)	2,4	µm
Typical Chemical Composition (of used powder)		
Al_2O_3	> 99,70	%
SiO_2	< 0,15	%
Na_2O	< 0,10	%
Fe_2O_3	< 0,05	%
CaO	< 0,05	%

REACH-Information:
This product is not subject to registration requirements under Regulation (EC) No. 1907/2006 (REACH). To the best of our knowledge, it does not contain any Substances of Very High Concern (SVHC) above the threshold of 0.1% by weight.

Disclaimer:
The data and information in this document are based on tests believed to be reliable and are indicative only. They are given to demonstrate typical values of the material but should under no circumstance be considered as a formal commitment. Material proposal is made according to specifications provided by the customer. These are non-binding suggestions on the part of the Sembach company without assumption of any development activity and/or liability. Application and acceptance of these is the sole decision-making authority of the customer. Requirements for the product are to be specified exclusively by the customer, and each customer must conduct its own testing for safety and regulatory evaluations. We point out that the Sembach company does not perform any development activity.

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