

STARCERAM[®] A (≥99.7%)

Chemical Formula	Al ₂ O ₃
Chemical Name	Aluminium Oxide
Characteristic	Dense sintered Aluminium Oxide
Description of Product	Parts made of dense sintered Aluminium Oxide
Colour	White

Chemical Characteristics

Al₂O₃ > 99.7 wt%

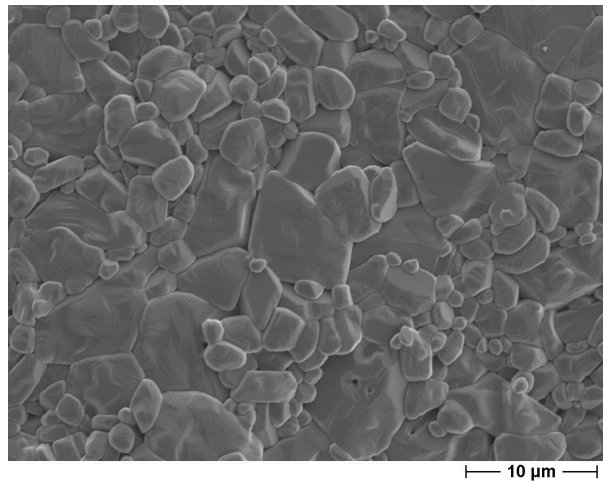
Mechanical and physical Properties

Density	3.9	g/cm ³
Closed porosity	0	vol%
Flexural strength $\sigma_{b4,m}$	300	MPa
Weibull modulus (RT)	> 10	
Young's modulus	380	GPa
Fracture toughness	4.7	MPa√m
Thermal conductivity (RT)	25	W/mK
Thermal expansion (RT-1000°C)	7.8	x10 ⁻⁶ /K ⁻¹
Hardness (DPH)	20	GPa
Thermal shock coefficient R1	80	K
Max. working temperature	1500	°C

Product Description and Applications

Products of our material STARCERAM[®] A are characterised by strength, hardness and temperature stability. STARCERAM[®] A show high abrasion stability and corrosion resistance also by high temperatures and has electric insulating properties.

SEM Photomicrograph
scale see photograph
STARCERAM[®] A



Example of products
STARCERAM[®] A



Packaging	STARCERAM® A products are individually packed, depending on size. Packaging according to transport regulations.
Storage and Handling	Handle with care! Ceramic products may break if not treated properly. Storage and handling are subject to the rules and regulations in the country of use.
Hazards identification in Advertising (REGULATION (EC) No 1272/2008 Article 48)	none.
Documentation	An inspection document in accordance with EN 10204 is supplied when requested.

H.C. Starck Ceramics GmbH
Lorenz-Hutschenreuther-Str. 81
95100 Selb/Germany
Phone +49 9287 807-0, Fax +49 9287 807-477

[Further contact addresses](#)

info@hcstarck.com

www.hcstarck.com