



## Fused Silica Silice Electrofondue Quarzgut elektrogeschmolzen

A high quality Fused Silica with extensive use in the production of refractories, crucibles, foundry cores and mild abrasives.

Produced from electrofusion of selected quartz sand.

Properties are:

- Excellent thermal shock resistance
- Extremely low thermal expansion
- Zero glass content
- Controlled surface properties
- Totally amorphous crystal structure (X-Ray Diffraction)

Cermatco is able to give complete specifications for an iron-free material down to ppm levels.

## Chemical Analysis

Oxide	%
SiO <sub>2</sub>	99.8
TiO <sub>2</sub>	500ppm
Al <sub>2</sub> O <sub>3</sub>	500ppm
Fe <sub>2</sub> O <sub>3</sub>	150ppm
CaO	50ppm
MgO	10ppm
K <sub>2</sub> O	50ppm
Na <sub>2</sub> O	30ppm

Typical analysis made using ICP analysis with SiO<sub>2</sub> determined by difference

Please note these data are not specifications

Physical properties

Specific Gravity: 2.3

pH 6.5

Coefficient of Thermal Expansion:

$0.54 \times 10^{-6} \text{ K}^{-1}$

Thermal Conductivity  
At 100°C

$0.0146 \text{ Jcm}^{-1} \text{ s}^{-1} \text{ K}^{-1}$

Free magnetic iron less than 20 ppm

Powders and Grains

Stucco Coating  
Gradings

16/30 mesh (1.5-0.5mm)  
22/60 mesh (0.7-0.2mm)  
30/80 mesh (0.5-0.15mm)  
50/80 mesh (0.35-0.15mm)

Flour, Farine  
Gradings

120 mesh (125 microns)  
200 mesh (80 microns)  
325 mesh (45 microns)

All size gradings are available with Laser particle size controls.

Many other size gradings also available.

Complete graded formulations (mixes) of Fused Silica are available providing you with a cost-effective controlled mix.



**Cermatco Limited**

Cooting Road, Aylesham,  
Kent CT3 3EP  
UK

Tel: 01304-842222

Fax: 01304-842434

Email: [Sales@cermatco.com](mailto:Sales@cermatco.com)