



Sunrock Ceramics Company
2625 S. 21st Avenue
Broadview, IL 60155
www.sunrockceramics.com

Technical Data Sheet

FS-90 Clay-Bonded Fused Silica Kiln Furniture

FS-90 is a clay-bonded fused silica material designed for kiln furniture or other thermal processing consumables, such as crucibles. The material has excellent thermal shock properties. Like most fused silica products, in certain applications and at higher use temperatures it may eventually re-crystallize into cristobalite, which will change the properties over time. However FS-90 has been formulated to minimize this phase transformation process. FS-90 can be cast into a wide variety of shapes.

| Typical Physical Properties | |
|-------------------------------------|-------------------------|
| Bulk Density (lbs/ft ³) | 120 lbs/ft ³ |
| Apparent Porosity (%) | 20% |
| Specific Gravity | 1.90 |
| Strength (ambient MOR, psi) | 900 psi |

| Typical Chemical Analysis (%) | |
|--------------------------------|------|
| Al ₂ O ₃ | 9.5 |
| SiO ₂ | 89.7 |
| Fe ₂ O ₃ | 0.3 |
| Alkalis | 0.5 |

| Typical Thermal Properties | |
|--|-----------------------------|
| Thermal Expansion (x10 ⁻⁶ / °F) | 1.4 x 10 ⁻⁶ / °F |
| Maximum Operating Temperature (°F) | 2300 °F |

The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures, or estimates based on previous analysis of similar materials. They are subject to normal variation and should not be used for warranty or specification purposes.