Refrax®

# PLUS Technical Datasheet

## Nitride Bonded Silicon Carbide

| Property | Value | | Method |
|---|---|---|---|
| Typical Chemical Analysis | SiC | 75 % | DIN EN ISO 21068 |
| | $Si_3N_4$+ $Si_2ON_2$ | 22 % | DIN 13925 |
| | Others | 3,5 % | DIN 51001 |
| Maximum application temperature | 1150 °C | | |
| Cold crushing strength | >140 MPa | | EN 993-5 |
| Modulus of rupture | ➢ 40 MPa | | EN 993-6 |
| Bulk density | 2,70 kg/dm³ | | EN 993-1 |
| Open Porosity | 13 % | | EN 993-1 |
| Linear thermal expansion<br>250 – 400 °C<br>250 – 600 °C<br>250 – 800 °C<br>250 -1000 °C | <br>3,9 10-6/K<br>3,9 10-6/K<br>4,0 10-6/K<br>4,6 10-6/K | | EN 993-19 |
| Thermal conductivity<br>at 400 °C<br>at 800 °C<br>at 1000 °C | <br>22 W/mK<br>18 W/mK<br>16 W/mK | | EN 993-15 |
| Thermal Shock Resistance | Cycles | > 30 | DIN 51068-1 |
| Steam oxidation resistance at 1000 °C / 500 h | Volume change | ≤ 0,8 | ASTM C863 |

www.refractories.saint-gobain.com



SAINT-GOBAIN

**Saint-Gobain Industrial Ceramics**
Mill Lane, Rainford, St. Helens
WA11 8LP • UK
P: +44 (0) 1744 882941
F: +44 (0) 1744 884746