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| --- | --- | --- | --- |
|  | | **BN99** | **ZCBN** |
| **Composite** | **Purity** | 99.5% | - |
| **B2O3** | 0.2% | 1.0% |
| **Oxygen** | <0.5% | 14% |
| **Carbon** | 0.02% | 2% |
| **Calcium** | 0.04% | 0.02% |
| **Zr** | - | 30% |
| **Si** | - | 4.5% |
| **Density g/cm3** | | 1.9 | 2.9 |
| **Color** | | White | Grey |
| **Max Working Temp.** °C | | 850°C in atmosphere | 1000°C in atmosphere |
| 1800°C in vacuum | 1800°C in vacuum |
| 3500°C in inert gas | 2000°C in inert gas |
| **Hardness Knoop(kg/mm2)** | | 4 | 105 |
| **flexural strength** | | 3000Psi | 21000Psi |
| **Thermal conductivity** | | 63W/mk | 38W/mk |
| **Coefficient thermal expansion** | | 0.6(x10-6/K) RT-1500°C | 3.5(x10-6/K) RT-1500°C |