



Fedsil 72-24

DESCRIPTION: Nitride-bonded silicon carbide brick

USES INCLUDE: Aluminum pots and furnaces, blast furnace, kiln furniture

CHEMICAL ANALYSIS: (TYPICAL CHEMICAL ANALYSIS)

(Approximate % by weight)

| | |
|--------------------------------|--------|
| SiC | 72.0 % |
| Si ₃ N ₄ | 23.5 % |
| SiO ₂ | 2.1 % |
| Fe ₂ O ₃ | 1.5 % |
| Al ₂ O ₃ | 0.9 % |

TYPICAL AS RECEIVED PROPERTIES:

| | |
|--|--------------|
| Apparent Porosity, % | 17 |
| Bulk Density, pcf (g/cm ³) | 164 (2.63) |
| Cold Crushing Strength, psi (MPa) | 22,000 (152) |
| Modulus of Rupture, psi (MPa) | |
| at room temperature | 5800 (40) |
| at 2500 °F | 6500 (45) |
| Thermal Expansion, (x106/°C) | 4.7 |
| Thermal conductivity (w/m.K) | |
| at 2370 °F | 15.6 |

The values reported above are average values derived from production data encompassing many different sizes and shapes. Actual data will vary to a small degree naturally, and as a function of size and shape. This form is not intended to be used for purposes of specification, it is informational only.

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