

CRITERION® 60 CASTABLE TS LEB10045 MX1N CASB

Monolithic Refractory Product Information

Revision: C.00 Date: 16 Dec 2009

CRITERION® 60 is a high alumina low cement vibration castable that requires only half the water needed for conventional castables, resulting in a product that has superior density, higher strength, lower porosity and iron content. It is designed to replace chemically comparable brick and castables in areas that demand high hot strength, increased erosion resistance, and reduced hot load deformation.

Service Temperature: $1649 \, ^{\circ}\text{C}$ Material Required: $2483 \, \text{kg/m}^{3}$ Typical Water Required: $5.0 - 6.0 \, \%$ Maximum Grain Size: $3 \, \text{Mesh}$ US Sieve

| hemical Analysis | | | | | | | |
|------------------|--------------------------------|--------------------------------|-----|-----|-------|--|--|
| SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ | CaO | MgO | Other | | |
| 34.5 | 60.8 | 1.0 | 1.8 | 0.1 | 0.3 | | |

| cal Physical Properti | | Tested in accordance with International and ASTM Stand | | | | |
|-----------------------|---------|--|--------------------|---------------|--|--|
| Prefired | Bulk | Cold | Cold | Permanent | | |
| to | Density | Crushing Strength | Modulus of Rupture | Linear Change | | |
| (°C) | (kg/m³) | (N/mm²) | (N/mm²) | (%) | | |
| 110 | 2483 | 60.9 | 17.5 | - | | |
| 816 | 2467 | 66.5 | 21.6 | -0.2 | | |
| 1093 | 2467 | 89.7 | 25.8 | -0.3 | | |
| 1371 | 2451 | 105.6 | 26.7 | -0.2 | | |
| 1649 | 2579 | 79.7 | 30 | -1.2 | | |

| Other Physical Properties | | Tested in accordance with International and ASTM Standards | | | |
|---------------------------|-----------------------------|--|--------------------------------------|-----------------------------------|--|
| Prefired to (°C) | Apparent Porosity (%) | Thermal Conductivity (W/m.K) | Hot Modulus of Rupture (N/mm²) | Permanent Volume Change (%) | |
| 110 | 6.7 | - | - | - | |
| 816 | 15.5 | - | 26.2 | - | |
| 1093 | 15.7 | - | 23.4 | - | |
| 1371 | 16.5 | - | 3.5 | - | |
| 1482 | - | - | 2.3 | - | |
| 1649 | 8.3 | - | - | - | |

Formerly: CRITERION® 60

Drying & Firing: LEB.1801 Installation Method: N/A Mixing / Installation: LEB.1101
Shotcreting: N/A Pumping: N/A MSDS Reference: LEB10045

The physical and/or chemical properties and specifications of the product set forth above represent typical average results obtained in accordance with generally accepted standard test methods conducted under controlled conditions, and are subject to normal manufacturing variations. Vesuvius reserves the right to modify the properties and specifications at any time without prior notice.

NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS INFORMATION, THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR PURPOSE, OR THE RESULTS TO BE OBTAINED BY THE USE OF THE PRODUCT. USERS EXPRESSLY ASSUME ALL RISKS AND LIABILITIES ARISING FROM THE USE OF OR RELIANCE UPON THIS INFORMATION.