

# MILBRO REFRACTORIES, INC.

## MILCAST 29

A low iron, high alumina, castable. Volume stable and resists carbon disintegration and reducing atmospheres. Excellent strength. Typical applications are soaking pit bottoms and reheat furnace doors.

|   |                                |
|---|--------------------------------|
| <b>Service Temperature</b>              | <b>2900°F</b>                  |
| <b>Material Required for Estimating</b> | <b>140 lbs./ft<sup>3</sup></b> |
| <b>Mixing Water Required</b>            | <b>4.5-5.5 qt./100lbs</b>      |

### TYPICAL CHEMICAL ANALYSIS

|                                |      |
|--------------------------------|------|
| Al <sub>2</sub> O <sub>3</sub> | 55.3 |
| SiO <sub>2</sub>               | 37.9 |
| Fe <sub>2</sub> O <sub>3</sub> | 1.6  |
| TiO <sub>2</sub>               | 1.8  |
| MgO                            | 0.2  |
| CaO                            | 3.0  |
| Alkalies                       | 0.2  |

### TYPICAL PHYSICAL PROPERTIES

| Temperature<br>°F | Modulus of<br>Rupture, psi | Cold Crushing<br>Strength, psi | Linear change<br>% |
|-------------------|----------------------------|--------------------------------|--------------------|
| 220°F             | 600-800                    | 2500-3000                      | 0.1S               |
| 1000°F            | 350-400                    | 2200-2500                      | 0.2 S              |
| 1500°F            | 450-500                    | 1800-2200                      | 0.3 S              |
| 2000°F            | 400-500                    | 1500-1800                      | 0.7 S              |
| 2500°F            | 900-1100                   | 2800-3100                      | 0.1 S              |
| 2750°F            | 1200-1400                  | 3100-3400                      | 0.3 E              |

All data shown is based on average results of standard ASTM procedures, unless otherwise indicated. Results are subject to reasonable deviation and should not be used for specification purposes.