

# MILBRO REFRACTORIES, INC.

## MILBRO PUTTY 60

A fine grain, chemically bonded, patching refractory. MILBRO PUTTY 60 exhibits high hot strengths, low porosity and volume stability. High plasticity makes MILBRO PUTTY 60 ideal for patching and maintaining monolithic linings. Used for patching ladles, aluminum launderers and troughs. Ideal for refractory maintenance in carbon bake furnaces

<b>Service Temperature</b>	<b>3100° F</b>
<b>Melting Point</b>	<b>3190° F</b>
<b>Material Required for Estimating</b>	<b>170 lbs./ft<sup>3</sup></b>

### TYPICAL CHEMICAL ANALYSIS

Al <sub>2</sub> O <sub>3</sub>	61.2
SiO <sub>2</sub>	30.4
Fe <sub>2</sub> O <sub>3</sub>	1.8
TiO <sub>2</sub>	2.3
MgO	0.2
CaO	0.2
P <sub>2</sub> O <sub>5</sub>	3.9

### TYPICAL PHYSICAL PROPERTIES

Temperature °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear change %
220°F	400-600	1500-1950	0.4 S
1500°F	300-400	1500-1900	0.2 S
2000°F	500-700	2100-2400	0.2 S
2500°F	900-1300	3500-3800	0.4 E
3000°F	800-1200	3400-3750	1.0 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.