

# MILBRO REFRACTORIES, INC.

## VIBEPLAS 33

A high alumina, chemically bonded, vibratable plastic. Very high hot strengths and high refractoriness with low porosity and excellent resistance to metal penetration and the corrosive effect of slags are additional features. Typical applications include pouring ladles in iron, steel, brass, copper and aluminum. Also, tundish linings and desulphurizing vessels in ductile iron are additional applications

<b>Service Temperature</b>	<b>3300° F</b>
<b>Melting Point</b>	<b>3425° F</b>
<b>Material Required for Estimating</b>	<b>175 lbs./ft<sup>3</sup></b>

### TYPICAL CHEMICAL ANALYSIS

Al <sub>2</sub> O <sub>3</sub>	84.9
SiO <sub>2</sub>	8.8
Fe <sub>2</sub> O <sub>3</sub>	1.2
TiO <sub>2</sub>	1.5
MgO	0.1
CaO	0.1
P <sub>2</sub> O <sub>5</sub>	3.4

### TYPICAL PHYSICAL PROPERTIES

Temperature °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear change %
500°F	600-800	2300-2600	0.2 S
2000°F	1600-1900	6400-7600	0.5 E
2500°F	1800-2150	7200-8000	0.8 E
3000°F	2400-2700	9200-9800	0.2 E