

# HIGH TEMPERATURE GUNNING

## Product Data

Ref:34/31/10/12

**Description:** Dense Hydraulic Bonded Gunning Mix For Use To 1600°C.

- Features:**
- Good flow characteristics through the gun.
  - Low rebound.
  - Resists vitrification and exhibits excellent resistance to spalling.

- Uses:**
- Suitable for use where slagging is a problem.

### Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO <sub>2</sub>	32.6%
Alumina - Al <sub>2</sub> O <sub>3</sub>	60.1%
Titania - TiO <sub>2</sub>	1.4%
Iron Oxide - Fe <sub>2</sub> O <sub>3</sub>	0.9%
Lime - CaO	4.6%
Magnesia - MgO	0.1%
Alkalies - Na <sub>2</sub> O + K <sub>2</sub> O	0.3%

### Physical Properties

Maximum Recommended Temperature	Gunned 1600°C
Quantity Required	2160 Kgs/m <sup>3</sup> Note: No allowance for rebound loss.
Bulk Density	Kgs/m <sup>3</sup>
After Heating at 105°C	2130 - 2290
After Heating at 815°C	2050 - 2210
Modulus of Rupture - ASTM C133 and C865	MPa
After Heating at 105°C	3.0 - 8.0
After Heating at 815°C	2.0 - 5.0
After Heating at 1095°C	2.0 - 5.0
After Heating at 1370°C	2.0 - 5.0
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	20.0 - 30.0
After Heating at 815°C	13.0 - 21.0
After Heating at 1095°C	10.0 - 18.0
After Heating at 1370°C	13.0 - 21.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 105°C	Less than 0.1% Shr
After Heating at 815°C	0.1 - 0.2% Shr
After Heating at 1095°C	0.2 - 0.3% Shr
After Heating at 1370°C	0.5 Shr - 1.5% Exp
After Heating at 1480°C	1.0 Shr - 1.0% Exp
Thermal Conductivity	W/mK
At 205°C	1.17
At 425°C	1.12
At 650°C	1.1
At 870°C	1.05
At 1095°C	1.07
At 1315°C	1.08
Shelf Life (Under Proper Storage Conditions)	365 days

Note: The test data shown are based on average results of control tests and are subject to normal variation on individual tests. These results cannot be taken as maximum or minimum requirements for specification purposes.

MSDS, Installation Guidelines and Dry Out Schedules are also available.