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Technical Data Sheet Redline Red Hot G 45

Product # 52408

Available Internationally As:

Redline Red Hot G 45

Product Description:

A flint based gun mix designed for resurfacing existing refractory surfaces. It is generally applied in hot conditions, but can also be used cold.

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 9 months

Service Limit: 2700 °F 1480 °C

Contact Limit: N/A °F N/A °C

Bulk Density - In Service: 120 pcf 1922 kg/m³

Bulk Density - To Place: 120 pcf 1922 kg/m³

Minimum Time To Firing: 24 hr

Abrasion Loss after 1500°F / 815°C
 per ASTM C704

N/A cc

| Chemistry (calcined) % | | | | | |
|--------------------------------|------|-------------------------------|-----|------------------|-----|
| Al ₂ O ₃ | 44.3 | Alk | 0.8 | MgO | 0.2 |
| SiO ₂ | 50.2 | TiO ₂ | 2.1 | ZrO ₂ | |
| CaO | 1.5 | P ₂ O ₅ | | Other | |
| Fe ₂ O ₃ | 0.9 | SiC | | | |

| Water Range Per Standard Package | | % | Quarts | Liters |
|----------------------------------|-----|---|--------|--------|
| Vib Casting | min | | | |
| | max | | | |
| Casting | min | | | |
| | max | | | |
| Pumping | min | | | |
| | max | | | |

Coefficient of Thermal Expansion (reversible):

2.9 x 10⁻⁶ in/in/°F / 5.2 x 10⁻⁶ mm/mm/°C

| Thermal Conductivity | btu*in/hr*ft ² *°F | W/m°C |
|----------------------|-------------------------------|-------|
| 500°F / 260°C | 8.0 | 1.15 |
| 1000°F / 540°C | 8.0 | 1.15 |
| 1500°F / 815°C | 7.9 | 1.14 |
| 2000°F / 1090°C | 7.5 | 1.08 |

| Temperature | | Linear Change% per ASTM C113 | CCS per ASTM C133 | | Cold MOR per ASTM C133 | | Hot MOR per ASTM C583 | |
|-------------|------|---------------------------------|----------------------|-----|---------------------------|-----|--------------------------|-----|
| °F | °C | | psi | MPa | psi | MPa | psi | MPa |
| 250 | 120 | 0.0 | 850 | 6.0 | 330 | 2.3 | | |
| 1000 | 540 | | | | | | | |
| 1500 | 820 | -0.2 | 600 | 4.1 | 100 | 0.7 | 150 | 1.0 |
| 2000 | 1090 | -0.4 | | | 250 | 1.7 | 170 | 1.2 |
| 3000 | 1650 | | | | | | | |

Other Data:

Release Date: 28 May 2024

Heat Up Guide: Redline Schedule 3

ASTM Class: C 401 Class D

Low Cement Castable

Refractory material should be stored in a cool, dry environment.

Note: All data are averaged results of ASTM tests (where applicable) on laboratory specimens. Reasonable variations in data can be expected. Data is not to be used for specification purposes. Product data is periodically updated to reflect product, raw material, process and/or testing changes. Please consult your Plibrico representative to make sure you have the most current data.