

## **Technical Data Sheet**

## Redline Redgun 60A

Product # 52401

Available Internationally As:

Redline Redgun 60A

## **Product Description:**

A mullite based gun material which exhibits good thermal shock resistance and volume stability. It contains a non-wetting additive system which makes it resistant to molten aluminum. Applications include resurfacing aluminum furnace walls (upper and lower), and in some cases, complete wall thicknesses.

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 9 months

Service Limit:  $3100 \,^{\circ}\text{F}$   $1700 \,^{\circ}\text{C}$ Contact Limit:  $1700 \,^{\circ}\text{F}$   $927 \,^{\circ}\text{C}$ 

Bulk Density - In Service: 139 pcf 2227 kg/m<sup>3</sup>

Bulk Density - To Place: 139 pcf 2227 kg/m<sup>3</sup>

Minimum Time To Firing: 24 hr

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

<b>Abrasion</b>	Loss	after	1500°F	/ 815°C
-----------------	------	-------	--------	---------

per ASTM C704

N/A cc

Chemistry (calcined) %							
Al <sub>2</sub> O <sub>3</sub>	59.8	Alk	0.3	MgO	0.2		
SiO <sub>2</sub>	34.8	TiO <sub>2</sub>	1.6	ZrO <sub>2</sub>			
CaO	2.0	P <sub>2</sub> O <sub>5</sub>		Other			
Fe <sub>2</sub> O <sub>3</sub>	1.1	SiC					

## Coefficient of Thermal Expansion (reversable): $x \cdot 10^{-6} \text{ in/in/}^{\circ}\text{F} / x \cdot 10^{-6} \text{ mm/mm/}^{\circ}\text{C}$

Thermal Conductivity	btu*in/hr*ft²*°F	W/m°C
500°F / 260°C	4.8	0.69
1000°F / <i>540</i> °C	5.7	0.82
1500°F / 81 <i>5</i> °C	7.0	1.01

8.8

2000°F / 1090°C

1.27

Temperature		Linear	CCS per ASTM C133		Cold MOR per ASTM C133		Hot MOR per ASTM C583	
°F	°C	Change% per ASTM C113	psi	MPa	psi	MPa	psi	MPa
250	120	-0.1	4700	32.0	980	6.8		
1000	540	-0.2			870	6.0		
1500	820	-0.2			1020	7.0		
2000	1090	-0.2			1100	7.6		
2500	1370	0.4			1350	9.3		

Other Data:

Release Date: 1 Jun 1998

Heat Up Guide: Redline Schedule 3

ASTM Class: C 401 Class F

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.