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Technical Data Sheet Redline Redgun 45ES

Product # 52302

Available Internationally As:

Redline Redgun 45ES

Product Description:

This first quality gunning mix exhibits excellent strengths combined with good resistance to abrasion and mechanical abuse. It is a general purpose mix that has many applications. Common applications include marine and stationary boilers, ashpits, and cement clinker coolers.

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 12 months

Service Limit: 2500 °F 1370 °C

Contact Limit: N/A °F N/A °C

Bulk Density - In Service: 123 pcf 1970 kg/m³

Bulk Density - To Place: 123 pcf 1970 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	46.9	Alk	0.9	MgO	0.3
SiO ₂	37.9	TiO ₂	1.7	ZrO ₂	
CaO	9.6	P ₂ O ₅		Other	
Fe ₂ O ₃	2.4	SiC			

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

Coefficient of Thermal Expansion (reversible):

x 10⁻⁶ in/in/°F / x 10⁻⁶ mm/mm/°C

Thermal Conductivity	btu*in/hr*ft ² *°F	W/m°C
500°F / 260°C	3.9	0.56
1000°F / 540°C	4.7	0.68
1500°F / 815°C	5.7	0.82
2000°F / 1090°C	7.3	1.05

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	-0.1	3500	24.0	990	6.8		
1000	540	-0.2			610	4.2		
1500	820	-0.2			575	4.0		
2000	1090	-0.4			500	3.4		
2500	1370	0.6			1620	11.2		

Other Data:

Release Date: 1 Jun 1998

Heat Up Guide: Redline Schedule 3

ASTM Class: C 401 Class C
 Regular 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.