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Technical Data Sheet Redline Redcast 70A

Product # 52204

Available Internationally As:

Redline Redcast 70A

Product Description:

This high purity mullite castable shows outstanding strength, abrasion and thermal shock resistance, and is highly resistant to alkali attack. It is designed for severe wear areas which are subject to oxide growth within aluminum melting equipment. Used where high mag containing alloys are a problem as well as in transfer troughing.

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 6 months

Service Limit: 3100 °F 1700 °C

Contact Limit: 1700 °F 927 °C

Bulk Density - In Service: 167 pcf 2675 kg/m³

Bulk Density - To Place: 167 pcf 2675 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	69.4	Alk	0.2	MgO	0.1
SiO ₂	24.9	TiO ₂	1.4	ZrO ₂	
CaO	1.7	P ₂ O ₅		Other	
Fe ₂ O ₃	0.9	SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min	4.8	1.3	1.2
	max			
Casting	min	4.8	1.3	1.2
	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	11.6	1.67
1000°F / 540°C	11.8	1.70
1500°F / 815°C	12.6	1.81
2000°F / 1090°C	13.4	1.93

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	8800	61.0	2855	19.7		
1000	540	-0.1			2500	17.2		
1500	820	-0.1	13500	93.1	3990	27.5		
2000	1090	-0.2			4440	30.6		
3000	1650	-0.1			5110	35.2		

Other Data:

Release Date: 1 Jun 2005

Heat Up Guide: Redline Schedule 1

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.