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Technical Data Sheet Redline Rapidlite FS-A

Product # 53501

Available Internationally As:

Redline Rapidlite FS-A

Product Description:

A unique, chemically bonded, lightweight fused silica castable designed for molten aluminum contact applications that require thermal shock resistance and low thermal conductivity. This material is designed for use in moderate to light flow applications. It's unique bonding system allows for fast setting and turnaround. Stripping of molds can generally be done within 2 hours of casting. Will adhere extremely well to existing refractory surfaces.

Standard Packaging: 30 # / 14 kg Bag

Shelf Life: 6 months

Service Limit: 2200 °F 1200 °C

Contact Limit: 1700 °F 927 °C

Bulk Density - In Service: 82 pcf 1314 kg/m³

Bulk Density - To Place: 82 pcf 1314 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	19.0	Alk	0.1	MgO	
SiO ₂	73.9	TiO ₂	0.2	ZrO ₂	
CaO		P ₂ O ₅	4.7	Other	
Fe ₂ O ₃	0.8	SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min	12.5	1.8	1.7
	max			
Casting	min	12.5	1.8	1.7
	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	2.2	0.32
1000°F / 540°C	2.6	0.37
1500°F / 815°C	2.8	0.40
2000°F / 1090°C		

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	1000	7.0	655	4.5		
1000	540	0.2			565	3.9		
1500	820	0.2			560	3.9		

Other Data:

Release Date: 1 Oct 2008

Heat Up Guide: Redline Schedule 2

ASTM Class:

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.