

Technical Data Sheet

Redline Redphos 70A Mortar

Product # 59002

Available Internationally As: Redline Redphos 70A Mortar

Product Description:

A mullite based, high alumina, phosphate bonded wet mortar. Exhibits excellent non-wetting properties and good strength. It can be used for laying high and extra high alumina brick as well as for a protective brush coating on existing refractory surfaces.

Standard Packaging: 60 # / 27 kg Pail

Shelf Life: 6 months

Service Limit: $3150\,^{\circ}\text{F}$ $1730\,^{\circ}\text{C}$ Contact Limit: $1700\,^{\circ}\text{F}$ $927\,^{\circ}\text{C}$

Bulk Density - In Service: 450 pcf 7209 kg/m³

Bulk Density - To Place: 450 pcf 7209 kg/m³

Minimum Time To Firing: 0 hr

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

Abrasion Loss after 1500°F / 815°C

per ASTM C704

N/A cc

Chemistry (calcined) %						
Al ₂ O ₃	71.0	Alk		MgO	0.1	
SiO ₂	19.9	TiO ₂	1.1	ZrO ₂		
CaO	0.1	P ₂ O ₅	6.9	Other		
Fe ₂ O ₃	0.8	SiC				

Coefficient of Thermal Expansion (reversable):

 $x 10^{-6} in/in/^{\circ}F / x 10^{-6} mm/mm/^{\circ}C$

Thermal Conductivity	btu*in/hr*ft²*°F	W/m°C
500°F / 260°C		
1000°F / <i>540</i> °C		
1500°F / <i>815</i> °C		
2000°F / 1090°C		

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	2150	15.0	500	3.4		
1500	820	-0.1	2000	13.8	500	3.4		
3000	1650	0.1	6100	42.1	2600	17.9		

Other Data: PREVENT MATERIAL FROM FREEZING: During cold weather this material must be shipped and stored in a warm place to prevent freezing. In warm weather, store in a cool dry place to prevent drying out.

Release Date: 1 Jun 2000

Heat Up Guide: Redline Schedule 2

ASTM Class: C 673 70% Alumina

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.