

Plico SR 68

Product Number 10068

Date 2/10/2014

Product Description

A 70% alumina, mullite based, soft, fine grained phosphate bonded plastic designed for thin applications and to patch and repair existing linings. Non wetting to aluminum alloys.

Service limit - 3100°F 1,704 °C

Std. package 55 # / 25 kg Carton

Density to place 165 pcf 2,643 kg/m³

Water range per std. package:

Density in service 150 pcf 2,403 kg/m³

Casting to qts 0.0 to 0.0 l

Min time before firing none

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	67.5	P ₂ O ₅	2.8
SiO ₂	27.2	Alk.	0.1
Fe ₂ O ₃	0.8	MgO	0.2
CaO	0.1	SiC	
TiO ₂	1.4	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	8.1	1.16
1000F / 540C	8.3	1.19
1500F / 815C	9.1	1.31
2000F / 1090C	10.5	1.51

Abrasion Loss

per ASTM C 704
after 1500 F

7 cc

Coefficient of Thermal Expansion

(reversible)

3.7 x 10⁻⁶ in/in F

6.6 x 10⁻⁶ m/m C

Temperature per ASTM C113 / C865	Linear Change per ASTM C113 / C179	Cold MOR		CCS		Hot MOR	
		per ASTM C133 psi	MPa	per ASTM C133 psi	MPa	per ASTM C583 psi	MPa
230 F / 110 C	-0.8%	1200	8.3	2800	19		
1500 F / 815 C	-0.6%	1600	11.0	4200	29	3000	20.7
2000 F / 1090C	-0.5%	2000	13.8		0	1000	6.9
2500 F / 1370 C	-0.2%	3000	20.7		0	700	4.8
	-1.5%	4000	27.6		0		0.0

Other Data

Heat Up Guide

Schedule A

ASTM Class

C 673 70% Alumina

Plastic Refractory

Note:

All data are averaged results of ASTM tests (where applicable) on laboratory pressed 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 / testing changes. Please consult your Plico representative to make sure you have the most current data.

Plico Refractories are manufactured by Plibrico Company LLC, USA.