

Plico Flow LC 3100 Special KK

Product Number 14420

Date 2/10/2014

Product Description

A 60% alumina, mullite based, self leveling. low cement castable.

Service limit - 3100°F 1,704 °C

Density to place 150 pcf 2,403 kg/m³

Density in service 150 pcf 2,403 kg/m³

Min time before firing 24 hr

Std. package 55 # / 25 kg Bag

Water range per std. package:

Casting 1.7 to 1.9 qts 1.6 to 1.8 l

Pumping 1.8 to 2.0 qts 1.6 to 1.9 l

Chemistry % (calcined)

Al ₂ O ₃	61.6	P ₂ O ₅	
SiO ₂	33.9	Alk.	0.2
Fe ₂ O ₃	0.9	MgO	0.1
CaO	1.5	SiC	
TiO ₂	1.6	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	10.7	1.54
1000F / 540C	11.3	1.62
1500F / 815C	12.0	1.72
2000F / 1090C	12.6	1.81

Abrasion Loss

per ASTM C 704
after 1500 F

7 cc

Coefficient of Thermal Expansion
(reversible)

3.6 x 10⁻⁶ in/in F

6.4 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	0.0%	1600	11.0	7200	50		
1500 F / 815 C	-0.2%	2400	16.6	9000	62	2900	20.0
2000 F / 1090C	-0.4%	2800	19.3		0	3300	22.8
2500 F / 1370 C	0.4%	3000	20.7		0	850	5.9
3000 F / 1650 C	-0.9%	3100	21.4		0		0.0

Other Data

Heat Up Guide

Schedule C or C-Linear

ASTM Class

C 401 Class F

Low Cement Castable

Note:

All data are averaged results of ASTM tests (where applicable) on laboratory self flow cast 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.