

Plico Castable LC 65 C KK

Product Number 14284

Date 2/10/2014

Product Description

A coarse grain, low cement castable with excellent resistance to thermal cycling and fracture.
Preliminary data.

Service limit - 3100°F 1,704 °C

Density to place 155 pcf 2,483 kg/m³

Density in service 155 pcf 2,483 kg/m³

Min time before firing 16 hr

Std. package 1250 # / 568 kg Bag

Water range per std. package:

Casting 38.0 to 42.0 qts 35.9 to 39.7 l

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	65.4	P ₂ O ₅	
SiO ₂	29.9	Alk.	0.2
Fe ₂ O ₃	0.9	MgO	0.1
CaO	1.7	SiC	
TiO ₂	1.7	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	11.2	1.61
1000F / 540C	11.8	1.69
1500F / 815C	12.5	1.8
2000F / 1090C	13.1	1.88

Abrasion Loss

per ASTM C 704
after 1500 F

9 cc

Coefficient of Thermal Expansion

(reversible)

3.9 x 10⁻⁶ in/in F

7 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%	2000	13.8	7500	52		
1500 F / 815 C	-0.2%	2300	15.9	8500	59	3200	22.1
1800 F / 980 C	-0.3%	2500	17.2		0	3400	23.4
2000 F / 1090 C	-0.4%	2800	19.3		0	3500	24.1
2500 F / 1370 C	0.6%	3000	20.7		0	1000	6.9

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 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.