

Plico Castable C/G LW 23 LI

Product Number 16226

Date 2/10/2014

Product Description

A very low iron intermediate temperature insulating castable.
Can be cast or gunned (see other data for gunned data).

Service limit - 2300°F 1,260 °C

Std. package 55 # / 25 kg Bag

Density to place 68 pcf 1,089 kg/m³

Water range per std. package:

Density in service 68 pcf 1,089 kg/m³

Casting 9.0 to 10.0 qts 8.5 to 9.5 l

Min time before firing 24 hr

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	52.2	P ₂ O ₅	
SiO ₂	28.7	Alk.	1.7
Fe ₂ O ₃	0.6	MgO	0.2
CaO	15.8	SiC	
TiO ₂	1.0	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	2.0	0.28
1000F / 540C	2.1	0.3
1500F / 815C	2.3	0.33
2000F / 1090C	2.6	0.37

Abrasion Loss

per ASTM C 704
after 1500 F

cc

Coefficient of Thermal Expansion
(reversible)

2.9 x 10⁻⁶ in/in F

5.2 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	-0.2%	450	3.1	1700	12		
1000 F / 540 C	-0.5%	250	1.7		0		0.0
1500 F / 815 C	-0.7%	270	1.9	1000	7		0.0
2000 F / 1090 C	-1.1%	200	1.4		0		0.0
2300 F / 1260 C	-1.5%	210	1.4		0		0.0

Other Data

Gunned - density to place & in service 72 pcf,
230F - CCS 1500psi CMOR 500psi 1500F - CCS 1000psi CMOR 250psi

Heat Up Guide

Schedule B

ASTM Class

C 401 Class P

Insulating 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.