

**Plico Castable C/G LW**

Product Number 18112

Date 2/10/2014

**Product Description**

An economical insulating castable suitable for both casting and gunning application. Cast data - see "other data" for gunned density and strength.

**Service limit -** 2400°F 1,315 °C

**Std. package** 55 # / 25 kg Bag

**Density to place** 65 pcf 1,041 kg/m<sup>3</sup>

**Water range per std. package:**

**Density in service** 65 pcf 1,041 kg/m<sup>3</sup>

**Casting** 9.9 to 11.0 qts 9.4 to 10.4 l

**Min time before firing** 24 hr

**Pumping** to qts 0.0 to 0.0 l

**Chemistry % (calcined)**

Al <sub>2</sub> O <sub>3</sub>	41.1	P <sub>2</sub> O <sub>5</sub>	
SiO <sub>2</sub>	43.4	Alk.	1.6
Fe <sub>2</sub> O <sub>3</sub>	2.5	MgO	0.3
CaO	9.1	SiC	
TiO <sub>2</sub>	1.8	ZrO <sub>2</sub>	
		Other	

**Thermal Conductivity**

	btu*in/hr*ff <sup>2</sup> *°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)

2.4 x 10<sup>-6</sup> in/in F

4.3 x 10<sup>-6</sup> 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	-0.1%	250	1.7	575	4		
1500 F / 815 C	-0.5%	170	1.2	500	3		0.0
2000 F / 1090C	-1.0%	125	0.9		0		0.0
2400 F / 1315 C	-1.6%	175	1.2		0		0.0
			0.0		0		0.0

**Other Data**

Gunned - density to place & in service 68 pcf,

230F - CCS 700psi CMOR 300psi  
1500F - CCS 550psi CMOR 200psi

**Heat Up Guide**

Schedule B

**ASTM Class**

C 401 Class Q

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.*