

**Plico Castable LW 22**

Product Number 16015

Date 2/10/2014

**Product Description**

An intermediate temperature insulating castable.

**Service limit -** 2200°F 1,204 °C

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

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

**Min time before firing** 24 hr

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

**Water range per std. package:**

**Casting** 8.8 to 10.3 qts 8.3 to 9.7 l

**Pumping** to qts 0.0 to 0.0 l

**Chemistry % (calcined)**

Al <sub>2</sub> O <sub>3</sub>	40.4	P <sub>2</sub> O <sub>5</sub>	
SiO <sub>2</sub>	32.6	Alk.	1.6
Fe <sub>2</sub> O <sub>3</sub>	4.2	MgO	0.5
CaO	19.1	SiC	
TiO <sub>2</sub>	1.7	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)

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

5 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	-0.2%	300	2.1	1200	8		
1000 F / 540 C	-0.5%	170	1.2		0	150	1.0
1500 F / 815 C	-0.6%	150	1.0	750	5	150	1.0
2000 F / 1090 C	-1.0%	120	0.8		0	75	0.5
2200 F / 1205 C	-1.4%	75	0.5		0		0.0

**Other Data**

**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.*