

**Plico Castable Trowl Mix**

Product Number 14016

Date 2/10/2014

**Product Description**

An intermediate duty refractory castable designed for trowelling application.

**Service limit -** 2400°F 1,315 °C

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

**Density to place** 112 pcf 1,794 kg/m<sup>3</sup>

**Water range per std. package:**

**Density in service** 112 pcf 1,794 kg/m<sup>3</sup>

**Casting** 4.5 to 5.5 qts 4.3 to 5.2 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>	45.0	P <sub>2</sub> O <sub>5</sub>	
SiO <sub>2</sub>	37.9	Alk.	0.5
Fe <sub>2</sub> O <sub>3</sub>	3.0	MgO	0.3
CaO	11.2	SiC	
TiO <sub>2</sub>	2.1	ZrO <sub>2</sub>	
		Other	

**Thermal Conductivity**

	btu*in/hr*ff <sup>2</sup> *°F	w/m°C
500F / 260C	4.6	0.66
1000F / 540C	4.7	0.67
1500F / 815C	4.8	0.69
2000F / 1090C	5.2	0.74

**Abrasion Loss**

per ASTM C 704  
after 1500 F

cc

**Coefficient of Thermal Expansion**

(reversible)

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

5.2 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	-0.3%	600	4.1	2000	14		
1500 F / 815 C	-0.8%	300	2.1	1200	8	350	2.4
2000 F / 1090C	-1.0%	350	2.4		0	225	1.6
2400 F / 1315 C	-1.3%	650	4.5		0		0.0
			0.0		0		0.0

**Other Data**

**Heat Up Guide**

Schedule B

**ASTM Class**

C 401 Class B

Regular Castable

**Note:**

All data are averaged results of ASTM tests (where applicable) on laboratory trowelled 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.*