



**Plibrico Company, LLC**  
**Plico Refractories**

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**Technical Data Sheet**

**Plico Castable LW 24 R KK**

Product Number 16031

Date 2/10/2014

**Product Description**

A moderate temperature, low iron insulating castable.

**Service limit -** 2450°F 1343 °C

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

**Density to place** 80 pcf 1,281 kg/m<sup>3</sup>

**Water range per std. package:**

**Density in service** 80 pcf 1,282 kg/m<sup>3</sup>

**Casting** 6.40 to 7.20 qts 6.05 to 6.81 l

**Min time before firing** 24 hr

**Pumping** to qts 0.00 to 0 l

**Chemistry % (calcined)**

Al <sub>2</sub> O <sub>3</sub>	42.5	P <sub>2</sub> O <sub>5</sub>	
SiO <sub>2</sub>	42.7	Alk.	1.3
Fe <sub>2</sub> O <sub>3</sub>	1.2	MgO	0.2
CaO	9.9	SiC	
TiO <sub>2</sub>	2.0	ZrO <sub>2</sub>	
		Other	

**Thermal Conductivity**

	btu*in/hr*ff <sup>2</sup> *°F	w/m°C
500F / 260C	2.6	0.37
1000F / 540C	2.7	0.38
1500F / 815C	2.9	0.41
2000F / 1090C	3.3	0.47

**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 <u>ASTM C113 / C865</u>	Linear Change per <u>ASTM C113 / C179</u>	Cold MOR		CCS		Hot MOR	
		per ASTM C133 <u>psi</u>	<u>MPa</u>	per ASTM C133 <u>psi</u>	<u>MPa</u>	per ASTM C583 <u>psi</u>	<u>MPa</u>
230 F / 110 C	-0.1%	250	1.7	900	6		
1000 F / 540 C	-0.4%	190	1.3		0	150	1.0
1500 F / 815 C	-0.6%	190	1.3	550	4	160	1.1
2000 F / 1090 C	-0.7%	150	1.0		0	150	1.0
2450 F / 1345 C	-1.3%	400	2.8		0		0.0

**Other Data**

**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 Plibrico representative to make sure you have the most current data.