

Plico Castable LW 24 P

Product Number 16052

Date 2/10/2014

Product Description

A moderate temperature insulating castable designed for pumping.

Service limit - 2450°F 1,343 °C

Std. package 55 # / 25 kg Bag

Density to place 83 pcf 1,329 kg/m³

Water range per std. package:

Density in service 83 pcf 1,330 kg/m³

Casting to qts 0.0 to 0.0 l

Min time before firing 24 hr

Pumping 6.0 to 7.5 qts 5.7 to 7.1 l

Chemistry % (calcined)

Al ₂ O ₃	43.5	P ₂ O ₅	
SiO ₂	42.4	Alk.	1.1
Fe ₂ O ₃	2.4	MgO	0.1
CaO	9.1	SiC	
TiO ₂	1.4	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°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 10⁻⁶ in/in F

5 x 10⁻⁶ 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%	400	2.8	1100	8		
1000 F / 540 C	-0.2%	200	1.4		0	160	1.1
1500 F / 815 C	-0.3%	250	1.7	700	5	175	1.2
2000 F / 1090 C	-0.7%	300	2.1		0	150	1.0
2450 F / 1345 C	-1.2%	450	3.1		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 pump 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.