

Plico Castable A-T 65 C KK

Product Number 16524

Date 2/10/2014

Product Description

A coarse grain, non wetting low cement castable with excellent resistance to thermal cycling and fracture.

Typical Aluminum Applications

Aluminum Melting and Holding furnaces: ramps, sill, jambs and lintels.

Service limit - 3100°F 1704 °C

Std. package 1250 # / 568 kg Bag

Al contact limit - 1700 °F 926°C

Water range per std. package:

Density to place 155 pcf 2,483 kg/m³

Casting 40.0 to 44.0 qts 37.8 to 41.6 l

Density in service 155 pcf 2,483 kg/m³

Pumping to qts 0.0 to 0.0 l

Min time before firing 16 hr

Chemistry % (calcined)

Al ₂ O ₃	64.5	P ₂ O ₅	
SiO ₂	29.8	Alk.	0.2
Fe ₂ O ₃	0.9	MgO	0.1
CaO	2.7	SiC	
TiO ₂	1.8	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ft ² *°F	w/m°C
500F / 260C	11.2	1.61
1000F / 540C	11.8	1.69
1500F / 815C	12.5	1.8
2000F / 1090C	13.1	1.88

Abrasion Loss

per ASTM C 704
after 1500 F

cc

Coefficient of Thermal Expansion

(reversible)

3.9 x 10⁻⁶ in/in F

7 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	0.0%	1700	11.7	6750	47		
1500 F / 815 C	-0.2%	2300	15.9	8500	59	3200	22.1
1800 F / 980 C	-0.3%	2500	17.2		0	3400	23.4
			0.0		0		0.0
			0.0		0		0.0

Other Data

Heat Up Guide

Schedule AT AS or AT AS Linear

ASTM Class

C 401 Class F

Low Cement 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.