

Plico Castable LC AZS KK

Product Number 14286

Date 2/10/2014

Product Description

An alkali resistant, AZS based low cement castable.

Service limit - 2800°F 1,537 °C

Density to place 180 pcf 2,883 kg/m³

Density in service 180 pcf 2,884 kg/m³

Min time before firing 16 hr

Std. package 55 # / 25 kg Bag

Water range per std. package:

Casting 1.6 to 1.8 qts 1.5 to 1.6 l

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	51.8	P ₂ O ₅	
SiO ₂	19.2	Alk.	0.2
Fe ₂ O ₃	0.3	MgO	0.0
CaO	1.6	SiC	4.8
TiO ₂	0.4	ZrO ₂	21.8
Other			

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	13.2	1.9
1000F / 540C	13.8	1.98
1500F / 815C	14.5	2.08
2000F / 1090C	15.1	2.17

Abrasion Loss

per ASTM C 704
after 1500 F

5 cc

Coefficient of Thermal Expansion

(reversible)

3.8 x 10⁻⁶ in/in F

6.8 x 10⁻⁶ 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	0.0%	1550	10.7	8500	59		
1500 F / 815 C	-0.2%	1700	11.7	8800	61	2100	14.5
2000 F / 1090C	-0.3%	2100	14.5		0	2500	17.2
2500 F / 1370 C	-0.4%	2600	17.9		0		0.0
			0.0		0		0.0

Other Data

Heat Up Guide

Schedule C or C-Linear

ASTM Class

C 401 Class D

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.