

Plico Castble AD-MOR 6 KK

Product Number 16551

Date 2/10/2014

Product Description

A 65% alumina, ultra low cement castables designed specifically for high temperature hot strength, load/creep resistance and thermal shock resistance.

Service limit - 3100°F 1,704 °C

Std. package 55 # / 25 kg Bag

Density to place 160 pcf 2,563 kg/m³

Water range per std. package:

Density in service 160 pcf 2,563 kg/m³

Casting 1.6 to 1.8 qts 1.5 to 1.6 l

Min time before firing 16 hr

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	62.5	P ₂ O ₅	
SiO ₂	34.9	Alk.	0.3
Fe ₂ O ₃	0.7	MgO	0.1
CaO	0.6	SiC	
TiO ₂	0.4	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	10.8	1.55
1000F / 540C	11.4	1.64
1500F / 815C	12.1	1.74
2000F / 1090C	12.7	1.82

Abrasion Loss

per ASTM C 704
after 1500 F

cc

Coefficient of Thermal Expansion
(reversible)

3.2 x 10⁻⁶ in/in F

5.7 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%	800	5.5	3000	21		
2000 F / 1090 C	-0.3%	1250	8.6		0	2800	19.3
2300 F / 1260 C		1275	8.8		0	1000	6.9
2500 F / 1370 C		1400	9.7		0	1300	9.0
2900 F / 1595 C	0.5%	1750	12.1		0		0.0

Other Data

ASTM C832 50 hr Creep @ 2600F w 25psi load - -0.15%

Heat Up Guide

Schedule C or C-Linear

ASTM Class

C 401 Class F

Ultra 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.