

Plico Gun Mix LC 7

Product Number 13069

Date 2/10/2014

Product Description

A 70% alumina, high hot strength, abrasion resistant, low cement gun mix. Note: optimum gunned properties requires the use of a water booster pump (min. water pressure at the nozzle - 125psi.) and a 16 hole water ring.

Service limit - 3100°F 1,704 °C

Std. package 55 # / 25 kg Bag

Density to place 152 pcf 2,435 kg/m³

Water range per std. package:

Density in service 152 pcf 2,435 kg/m³

Casting to qts 0.0 to 0.0 l

Min time before firing 16 hr

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	68.2	P ₂ O ₅	
SiO ₂	26.3	Alk.	0.2
Fe ₂ O ₃	1.3	MgO	0.1
CaO	1.9	SiC	
TiO ₂	1.8	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	8.5	1.22
1000F / 540C	7.3	1.05
1500F / 815C	8.1	1.16
2000F / 1090C	8.4	1.2

Abrasion Loss

per ASTM C 704
after 1500 F

9 cc

**Coefficient of
Thermal Expansion**
(reversible)

3.7 x 10⁻⁶ in/in F

6.6 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%	140	1.0	8500	59		
1500 F / 815 C	-0.3%	1300	9.0	7500	52	1600	11.0
2000 F / 1090C	-0.4%	1200	8.3		0	1500	10.3
2500 F / 1370 C	0.8%	1800	12.4		0		0.0
			0.0		0		0.0

Other Data

Heat Up Guide

Schedule C or C-Linear

ASTM Class

C 401 Class F

Low Cement Castable

Note:

All data are averaged results of ASTM tests (where applicable) on laboratory gunned 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.