

Plico Gun Mix 40

Product Number 14023

Date 2/10/2014

Product Description

A high alumina, high purity, refractory gun mix.

Service limit - 3300°F 1,815 °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 24 hr

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	91.8	P ₂ O ₅	
SiO ₂	1.7	Alk.	0.4
Fe ₂ O ₃	0.1	MgO	0.1
CaO	5.8	SiC	
TiO ₂		ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	17.0	2.44
1000F / 540C	13.5	1.94
1500F / 815C	12.0	1.72
2000F / 1090C	12.1	1.74

Abrasion Loss

per ASTM C 704
after 1500 F

cc

Coefficient of Thermal Expansion

(reversible)

5 x 10⁻⁶ in/in F

9 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%	900	6.2	3500	24		
1500 F / 815 C	-0.3%	550	3.8	3500	24	600	4.1
2000 F / 1090C	-0.3%	600	4.1		0	550	3.8
2500 F / 1370 C	-0.9%	1200	8.3		0		0.0
3000 F / 1650 C	-0.2%	2000	13.8		0		0.0

Other Data

Heat Up Guide

Schedule B

ASTM Class

C 401 Class G

Regular 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.