

Plico Gun Mix LW 28

Product Number 13016

Date 2/10/2014

Product Description

A high temperature, low iron, insulating refractory gun mix.

Service limit - 2800°F 1,537 °C

Std. package 55 # / 25 kg Bag

Density to place 90 pcf 1,441 kg/m³

Water range per std. package:

Density in service 90 pcf 1,442 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 | 51.6 | P ₂ O ₅ | |
| SiO ₂ | 37.4 | Alk. | 1.6 |
| Fe ₂ O ₃ | 0.7 | MgO | 0.2 |
| CaO | 7.6 | SiC | |
| TiO ₂ | 0.9 | ZrO ₂ | |
| | | Other | |

Thermal Conductivity

| | btu*in/hr*ff ² *°F | w/m°C |
|---------------|-------------------------------|-------|
| 500F / 260C | 3.1 | 0.44 |
| 1000F / 540C | 3.2 | 0.46 |
| 1500F / 815C | 3.4 | 0.48 |
| 2000F / 1090C | 3.9 | 0.56 |

Abrasion Loss

per ASTM C 704
after 1500 F

cc

Coefficient of Thermal Expansion

(reversible)

2.9 x 10⁻⁶ in/in F

5.2 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% | 500 | 3.4 | 800 | 6 | | |
| 1500 F / 815 C | -0.3% | 450 | 3.1 | 750 | 5 | 400 | 2.8 |
| 2000 F / 1090C | -0.5% | 400 | 2.8 | | 0 | 250 | 1.7 |
| 2500 F / 1370 C | 1.2% | 650 | 4.5 | | 0 | | 0.0 |
| 2800 F / 1540 C | 0.8% | 850 | 5.9 | | 0 | | 0.0 |

Other Data

Heat Up Guide

Schedule B

ASTM Class

C 401 Class S

Insulating 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.