



Plibrico Company, LLC
Plico Refractories

1935 Techny Road - Unit 16
 Northbrook, IL 60062
 Phone: 312-337-9000 Fax: 312-337-9003
 www.plico-refractories.com.com

Technical Data Sheet

Plico Gun Mix HyREZIST 3000

Product Number 13615

Date 2/10/2014

Product Description

A 50% alumina, low iron, high strength, abrasion resistant refractory gun mix.

Service limit - 3000°F 1,648 °C

Std. package 55 # / 25 kg Bag

Density to place 130 pcf 2,082 kg/m³

Water range per std. package:

Density in service 130 pcf 2,083 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	54.2	P ₂ O ₅	
SiO ₂	36.5	Alk.	0.6
Fe ₂ O ₃	0.8	MgO	0.1
CaO	6.0	SiC	
TiO ₂	1.8	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	7.4	1.06
1000F / 540C	7.7	1.1
1500F / 815C	8.2	1.18
2000F / 1090C	8.9	1.28

Abrasion Loss

per ASTM C 704
after 1500 F

11 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	-0.1%	1800	12.4	9500	66		
1500 F / 815 C	-0.2%	1300	9.0	6500	45	1600	11.0
2000 F / 1090C	-0.4%	1100	7.6		0	1100	7.6
2500 F / 1370 C	-0.1%	1800	12.4		0	250	1.7
3000 F / 1650 C	-1.4%	2400	16.6		0		0.0

Other Data

Heat Up Guide

Schedule B

ASTM Class

C 401 Class D

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.