

Plico HR 60 AB

Product Number 10048

Date 2/10/2014

Product Description

A 60% alumina, air bonded plastic designed for pneumatic application.

Service limit - 3100°F 1,704 °C

Std. package Variable wt piece

Density to place 157 pcf 2,515 kg/m³

Water range per std. package:

Density in service 148 pcf 2,371 kg/m³

Casting to qts 0.0 to 0.0 l

Min time before firing none

Pumping to qts 0.0 to 0.0 l

Chemistry % (calcined)

Al ₂ O ₃	60.3	P ₂ O ₅	
SiO ₂	35.9	Alk.	0.3
Fe ₂ O ₃	1.4	MgO	0.2
CaO	0.1	SiC	
TiO ₂	0.9	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	5.5	0.79
1000F / 540C	6.5	0.93
1500F / 815C	7.7	1.1
2000F / 1090C	9.1	1.31

Abrasion Loss

per ASTM C 704
after 1500 F

cc

Coefficient of Thermal Expansion
(reversible)

3.3 x 10⁻⁶ in/in F

5.9 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	-0.4%	600	4.1	700	5		
1500 F / 815 C	-0.5%	550	3.8	1000	7	600	4.1
2000 F / 1090C	-0.7%	650	4.5		0	900	6.2
2500 F / 1370 C	1.2%	750	5.2		0	200	1.4
3000 F / 1650 C	2.1%	1200	8.3		0		0.0

Other Data

Heat Up Guide

Schedule A

ASTM Class

C 673 60% Alumina

Plastic Refractory

Note:

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