



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 Castable LC SiC 80 KK

Product Number 13063

Date 2/10/2014

Product Description
 An 80% silicon carbide based, low cement castable.

Service limit - 2800°F 1,537 °C **Std. package** 55 # / 25 kg Bag
Density to place 156 pcf 2,499 kg/m³ **Water range per std. package:**
Density in service 156 pcf 2,499 kg/m³ **Casting** 1.4 to 1.6 qts 1.3 to 1.6 l
Min time before firing 16 hr **Pumping** 1.5 to 1.9 qts 1.4 to 1.8 l

Chemistry % (calcined)

Al ₂ O ₃	13.2	P ₂ O ₅	
SiO ₂	7.1	Alk.	0.1
Fe ₂ O ₃	0.2	MgO	0.0
CaO	1.5	SiC	77.8
TiO ₂	0.1	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² *°F	w/m°C
500F / 260C	50.9	7.32
1000F / 540C	50.4	7.25
1500F / 815C	50.3	7.24
2000F / 1090C	50.4	7.25

Abrasion Loss
 per ASTM C 704
 after 1500 F
 6 cc
Coefficient of Thermal Expansion
 (reversible)
 3.3 x 10⁻⁶ in/in F
 5.9 x 10⁻⁶ m/m C

Temperature per ASTM C113 / C865	Linear Change per ASTM C113 / C179	Cold MOR per ASTM C133		CCS per ASTM C133		Hot MOR per ASTM C583	
		psi	MPa	psi	MPa	psi	MPa
230 F / 110 C	0.0%	1900	13.1	14500	100		
1500 F / 815 C	-0.3%	2500	17.2	15000	103	5000	34.5
2000 F / 1090C	-0.4%	3200	22.1		0	4500	31.0
2500 F / 1370 C	0.5%	5000	34.5		0	1200	8.3
			0.0		0		0.0

Other Data

Heat Up Guide **ASTM Class** **Low Cement Castable**
 Schedule C or C-Linear

Note:
 All data are averaged results of ASTM tests (where applicable) on laboratory cast 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.