



Plibrico Company LLC

1010 N. Hooker Street
Chicago, IL 60642
Ph. 312 337-9000 Fax 312 337-9003
www.Plibrico.com

Technical Data Sheet

Pligun SiC 80 TM

Product Number 13071

Date 2/1/2012

Product Description

An 80% silicon carbide conventional gun mix that may also be applied by hand packing or troweling.

Service Limit - 2700°F 1482 °C

Std. package 50 # / 22.7 kg Bag

Density to place 138 pcf 2,210 kg/m³

Water range per std. package:

Density in service 138 pcf 2,211 kg/m³

Casting to qts 0 to 0 l

Mim Time before firing 24 hr

Pumping to qts 0.00 to 0 l

Chemistry % (calcined)

Al ₂ O ₃	11.3	P ₂ O ₅	
SiO ₂	5.4	Alk.	0.1
Fe ₂ O ₃	0.3	MgO	0.1
CaO	4.7	SiC	78.1
TiO ₂	0.2	ZrO ₂	
		Other	

Thermal Conductivity

	btu*in/hr*ff ² * F ⁰	w/m ² C
500F / 260C	32.5	4.68
1000F / 540C	28.2	4.06
1500F / 815C	31.3	4.5
2000F / 1090C	41.1	5.91

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 ASTM C113 / C865	Linear Change per ASTM C113 / C179	Cold MOR		CCS		Hot MOR	
		per ASTM C133 psi	MPa	per ASTM C133 psi	MPa	per ASTM C583 psi	MPa
230 F / 110 C	-0.1%	1100	7.6	4000	28		
1000 F / 540 C	-0.3%	850	5.9		0		0.0
1500 F / 815 C	-0.4%	900	6.2	3500	24	1200	8.3
2000 F / 1090 C	-0.3%	1200	8.3		0	1000	6.9
2500 F / 1370 C	-0.1%	1900	13.1		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 Plibrico representative to make sure you have the most current data.