



# Plibrico Company, LLC

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# Technical Data Sheet Plicast Trowl Mix

Product # 14016

Available Internationally As:

Plico Castable Trowl Mix

### Product Description:

An intermediate duty refractory castable designed for trowelling application.

**Standard Packaging:** 55 # / 25 kg Bag

**Shelf Life:** 12 months

**Service Limit:** 2400 °F 1320 °C

**Contact Limit:** N/A °F N/A °C

**Bulk Density - In Service:** 112 pcf 1794 kg/m<sup>3</sup>

**Bulk Density - To Place:** 112 pcf 1794 kg/m<sup>3</sup>

**Minimum Time To Firing:** 24 hr

**Abrasion Loss after 1500°F / 815°C**  
 per ASTM C704

N/A cc

Chemistry (calcined) %					
Al <sub>2</sub> O <sub>3</sub>	45.0	Alk	0.5	MgO	0.3
SiO <sub>2</sub>	37.9	TiO <sub>2</sub>	2.1	ZrO <sub>2</sub>	
CaO	11.2	P <sub>2</sub> O <sub>5</sub>		Other	
Fe <sub>2</sub> O <sub>3</sub>	3.0	SiC			

Water Range Per Standard Package		%	Quarts	Liters
<b>Vib Casting</b>	min			
	max			
<b>Casting</b>	min	17.0	4.5	4.3
	max	20.8	5.5	5.2
<b>Pumping</b>	min			
	max			

**Coefficient of Thermal Expansion (reversible):**

2.9 x 10<sup>-6</sup> in/in/°F / 5.2 x 10<sup>-6</sup> mm/mm/°C

Thermal Conductivity	btu*in/hr*ft <sup>2</sup> *°F	W/m°C
500°F / 260°C	4.6	0.7
1000°F / 540°C	4.7	0.7
1500°F / 815°C	4.8	0.7
2000°F / 1090°C	5.2	0.7

Temperature		Linear Change% per ASTM C113	CCS per ASTM C133		Cold MOR per ASTM C133		Hot MOR per ASTM C583	
°F	°C		psi	MPa	psi	MPa	psi	MPa
230	110	-0.3	2000	14.0	600	4.1		
1500	820	-0.8	1200	8.0	300	2.1	350	2.4
2000	1090	-1.0			350	2.4	225	1.6
2400	1320	-1.3			650	4.5		

Other Data:

Release Date: 1 Aug 2019

Heat Up Guide: Schedule B

ASTM Class: C 401 Class B Regular Castable

Refractory material should be stored in a cool, dry environment.

**Note:** All data are averaged results of ASTM tests (where applicable) on laboratory 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 and/or testing changes. Please consult your Plibrico representative to make sure you have the most current data.