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Technical Data Sheet Plicast Airlite 25 C/G

Product # 3271

Available Internationally As:

Plico Castable Airlite 25 C/G

Product Description:

A lightweight, insulating castable. Engineered as a "Liquid Board", this materials low thermal conductivity makes this castable a suitable alternative to insulation blocks. The material can be gunned, cast, or trowled into place to conform to complex geometries.

Gunned information reflected below, Cast specific information can be found in Other Data Section.

Standard Packaging: 40 # / 18 kg Bag

Shelf Life: 6 months

Service Limit: 2000 °F 1090 °C

Contact Limit: N/A °F N/A °C

Bulk Density - In Service: 35 pcf 561 kg/m³

Bulk Density - To Place: 35 pcf 561 kg/m³

Minimum Time To Firing: 24 hr

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

N/A cc

Chemistry (calcined) %					
Al ₂ O ₃	33.5	Alk	2.8	MgO	1.0
SiO ₂	37.0	TiO ₂	1.1	ZrO ₂	
CaO	20.0	P ₂ O ₅		Other	
Fe ₂ O ₃	4.6	SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min			
	max			
Casting	min	140.0	26.9	25.5
	max	150.0	28.8	27.3
Pumping	min			
	max			

Coefficient of Thermal Expansion (reversible):

1.8 x 10⁻⁶ in/in/°F / 3.2 x 10⁻⁶ mm/mm/°C

Thermal Conductivity	btu*in/hr*ft ² *°F	W/m ² *°C
500°F / 260°C	1.1	0.16
1000°F / 540°C	1.2	0.17
1500°F / 815°C	1.3	0.19
2000°F / 1090°C	1.5	0.22

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	0.4	114	1.0				
1500	820	-3.9	120	1.0				
1800	980	-4.9						
2000	1090	-5.5						

Other Data: **Cast Data:** Bulk Density: 25pcf, CCS: 230°F = 68psi, 1500°F = 88psi

Thermal Conductivity (btu*in/hr*ft²*°F): 500°F = 0.8, 1000°F = 1.0, 1500°F = 1.1, 2000°F = 1.3

Release/Revision Date: 1 Nov 2024

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

Heat Up Guide: Schedule B

ASTM Class: C 401 Class N
 Insulating Castable

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.