



Plibrico Company, LLC

1935 Techny Road - Unit 16
 Northbrook, IL 60062
 (312) 337-9000
 www.plibrico.com

Technical Data Sheet SiC Demon Mortar 85 Dry

Product # 17011

Available Internationally As:

SiC Demon Mortar 85 Dry

Product Description:

A dry, high silicon carbide content refractory mortar.

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 6 months

Service Limit: 2900 °F 1590 °C

Contact Limit: N/A °F N/A °C

Bulk Density - In Service: pcf kg/m³

Bulk Density - To Place: pcf kg/m³

Minimum Time To Firing: 0 hr

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

N/A cc

Chemistry (calcined) %					
Al ₂ O ₃	0.4	Alk	1.1	MgO	
SiO ₂	10.8	TiO ₂	0.1	ZrO ₂	
CaO		P ₂ O ₅		Other	
Fe ₂ O ₃	0.7	SiC	86.8		

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min			
	max			
Casting	min			
	max			
Pumping	min			
	max			

Coefficient of Thermal Expansion (reversible):

3.2 x 10⁻⁶ in/in/°F / 5.8 x 10⁻⁶ mm/mm/°C

Thermal Conductivity	btu*in/hr*ft ² *°F	W/m°C
500°F / 260°C	23.5	3.38
1000°F / 540°C	23.3	3.36
1500°F / 815°C	24.7	3.56
2000°F / 1090°C	27.0	3.89

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

Other Data: Required water for troweling: 5 to 5.5 qts (4.75 to 5.2 l) per 55# (25kg) bag.

Release Date: 5 May 2020

Heat Up Guide:

ASTM Class: C 1655 Super Duty

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.