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Technical Data Sheet

Plicast HyMOR 90 MA-7 V KK

Product # 14236

Available Internationally As: Plico Castable LC 90 MA-7 V

Product Description:

A high alumina, magnesium aluminate spinel enriched, low cement castable. Vibration cast only

Standard Packaging: 55 # / 25 kg Bag

Shelf Life: 3 months

Service Limit: 3300 °F 1820 °C

Contact Limit: N/A °F N/A °C

Bulk Density - In Service: 183 pcf 2932 kg/m³

Bulk Density - To Place: 183 pcf 2932 kg/m³

Minimum Time To Firing: 16 hr

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

N/A cc

Chemistry (calcined) %					
Al ₂ O ₃	91.7	Alk	0.3	MgO	6.3
SiO ₂	0.2	TiO ₂		ZrO ₂	
CaO	1.6	P ₂ O ₅		Other	
Fe ₂ O ₃		SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min			
	max			
Casting	min	4.2	1.1	1.1
	max	4.9	1.3	1.2
Pumping	min			
	max			

Coefficient of Thermal Expansion (reversible):

5.4 x 10⁻⁶ in/in/°F / 9.7 x 10⁻⁶ mm/mm/°C

Thermal Conductivity	btu*in/hr*ft ² *°F	W/m°C
500°F / 260°C	20.0	2.9
1000°F / 540°C	19.0	2.7
1500°F / 815°C	19.0	2.7
2000°F / 1090°C	20.0	2.9

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	0.0	8000	55.0	1800	12.4		
1500	820	-0.2	8000	55.0	1500	10.3	1300	9.0
2000	1090	-0.2			2000	13.8	1350	9.3
2500	1370	0.2			2500	17.2	2200	15.2
3000	1650	-0.3			2800	19.3		

Other Data:

Release Date: 1 Aug 2019

Heat Up Guide: Schedule C or C-Linear

ASTM Class: C 401 Class G Low Cement 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.