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REFRACTORY PRODUCT DATA SHEET

Data date: 8/17/2006

PLICAST HyMOR 3100 KK

Product # 14137

Product Description:
 An 80% alumina, bauxite based, low cement refractory castable.

Max. Service Limit::	3100 F / 1705 C	Density:	To Place	In Service
			170 pcf	170 pcf
			2723 kg/m ³	2723 kg/m ³
Packaging:	50 lb / 22.7 kg Bag			
Required Water:	1.4 qt. / 1.3 l per bag	Min. Time Before Firing:	24 Hrs.	

Chemistry - % (calined)

Al ₂ O ₃ 77.6	CaO 1.5	SiC
SiO ₂ 17.6	MgO 0.1	ZrO ₂
Fe ₂ O ₃ 1.5	Alk. 0.2	Other
TiO ₂ 1.5	P ₂ O ₅	

Abrasion Loss

(ASTM C704)
 1500 F / 815 C
 7 cc

Thermal Conductivity

	btu*in/hr*ft ² *F	w / m*C
500 F / 260 C	14.1	2
1000 F / 540 C	13.6	2
1500 F / 815 C	13.6	2
2000 F / 1095 C	14.1	2

Temperature	Linear Change - % ASTM C113	Cold MOR		Hot MOR		CCS	
		psi / MPa	ASTM C133	psi / MPa	ASTM C583	psi / MPa	ASTM C133
230 F / 110 C	-0.1	2400	16.6			12000	83
1000 F / 540 C	-0.2	1800	12.4	3400	23.4		0
1500 F / 815 C	-0.2	2700	18.6	4000	27.6	12000	83
2000 F / 1095 C	-0.4	3000	20.7	4500	31		0
2500 F / 1370 C	0.9	2800	19.3	1100	7.6		0
3000 F / 1650 C	0.6	3000	20.7		0		0

Bake out: Schedule C ASTM classification: F Low-Cement Castable

Note: Data should not be used for specification purposes. Product data is periodically updated to reflect product / raw material / process changes. Please consult with your Plibrico representative to insure you have the most current data.

All data are averaged results of laboratory ASTM tests on laboratory cast specimens. Reasonable variations can be expected.

Thermal conductivity will vary depending upon measurement method, installed density, and thermal treatment.

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