Plico Refractories
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Technical Data Sheet

Exo-Set UNO M G

Product Number 17437 Date 2/10/2014

Product Description
An one component, rapid hardening, chemically bonded, mullite based refractory castable. Exhibits excellent bonding adherence to old refractory. May be gunned hot or cold. Do not predampen. Non wetting to aluminum.

Typical Applications
As a primary lining or for maintenance repairs of metal contact areas in aluminum melting and holding furnaces, ladles, troughs and launders.

Service limit - 2500°F *1371 °C*
Density to place 142 pcf *2,274 kg/m3*
Density in service 142 pcf *2,275 kg/m3*
Min time before firing none

Std. package 55 # / 25 kg Bag
Water range per std. package:
Casting to qts *0.0 to 0.0 l*
Pumping to qts *0.0 to 0.0 l*

Chemistry % (calcined)

Al_2O_3	58.7	P_2O_5	4.8
SiO_2	26.2	Other	10.7

Thermal Conductivity

	btu*in/hr*ft²*°F	*w/m°C*
500F / 260C	8.0	*1.15*
1000F / 540C	8.2	*1.18*
1500F / 815C	9.0	*1.29*
2000F / 1090C	10.3	*1.48*

Abrasion Loss
per ASTM C 704
after 1500 F
12 cc

Coefficient of Thermal Expansion
(reversable)
3.6 x 10^-6 in/in F
6.4 x 10^-6 m/m C

Temperature per ASTM C113 / C865	Linear Change per ASTM C113 / C179	Cold MOR per ASTM C133 psi	Cold MOR per ASTM C133 *MPa*	CCS per ASTM C133 psi	CCS per ASTM C133 *MPa*	Hot MOR per ASTM C583 psi	Hot MOR per ASTM C583 *MPa*
230 F / 110 C	0.0%	1100	*7.6*	3000	*21*		
1000 F / 540 C	-0.2%	800	*5.5*		*0*	1100	*7.6*
1500 F / 815 C	-0.3%	1000	*6.9*	2000	*14*	1300	*9.0*
1800 F / 980 C	-0.4%	1300	*9.0*		*0*	900	*6.2*
			0.0		*0*		*0.0*

Other Data

Heat Up Guide
Schedule D

ASTM Class

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

Plico Refractories are manufactured by Plibrico Company LLC, USA.